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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MAGNETIC, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES

BOMBAY AND ALIBAG

IN THE YEAR

1933

UNDER THE DIRECTIONS OF

B. N. BANERJI, M.Sc., PH.D. (CANTAB.)

AND

S. C. ROY, M.Sc., D.Sc. (LOND.)

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INTRODUCTION.

This volume on the magnetic, meteorological and seismographic observations made in the Government Observatories, Bombay and Alibag, during the year 1933, is the fiftyfifth volume of its kind issued by the Observatory and extends the records of continuous meteorological and magnetic observations to a period of eightyeight years and seismographic observations to a period of thirtyfive years. It has been prepared in the same form as the volumes for the years 1932. The hourly values of all the important meteorological and magnetic elements have been given and these represent their average values over one hour and not their momentary values at the end of every hour. Columns have been added in this volume giving the daily mean values and the monthly mean hourly values of barometric pressure in milibars and of air temperature in degrees centigrade. As in the previous volume values of potential gradient centred at every sixth hour of Greenwich Mean Time have been given.

The transference of magnetic work from Colaba to Alibag in 1904, due to the city of Bombay having decided to have electric tram service, caused a certain amount of discontinuity in the magnetic records, which had run uninterruptedly then at Colaba for about sixty years, but as comparative observations could be taken at both the stations for a period of two years before the electric tram lines were completed and the service had commenced its operations, the 'discontinuity' could be calculated and allowed for. The comparative observations show that at Alibag, the horizontal component of magnetic force stands lower by 0·00510 C. G. S. unit of force, easterly declination stands higher by 53′·5 and inclination stands higher by 1° 4′·7 than at Colaba, and these are the finally adopted differences between the two sites. The figures published in this volume, like those in the previous volumes since 1906, have not been corrected for these differences.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Fort of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea. The regular registration of meteorological observations in the Colaba Observatory commenced in November 1841.

The astronomical co-ordinates* giving the position of the Colaba Observatory are :—

Latitude	18° 53′ 36·18″ N.
Longitude	72° 48′ 54·03″ E.

The Alibag Magnetic Observatory is situated on the main land about 18 miles south-south-east of Bombay, and its astronomical co-ordinates are—

Latitude	18° 38′ 17″ N.
Longitude	72° 52′ 21″ E.

For a general description of the buildings and instruments in both the Observatories, see "Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1906—1910," and also the similar volume for 1916—20.

Unless otherwise stated, all times given in this volume refer to local mean time.

Meteorological instruments at Colaba.

1. *Standard Barometer.*—The barometer is by Newman (No. 58) and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard and 0·012″ below the old Calcutta standard barometer. The height of the barometer is 37 feet above the mean sea-level. A subsidiary standard barometer, Newman No. 48, has also been maintained in the underground constant temperature room, and its reading exceeded that of the standard barometer by 0·001″ on the average during the year.

2. *Barograph.*—The instrument is of the Kew pattern and was installed in the underground constant temperature room in 1872. The variation of pressure is recorded photographically. The barograph has been treated, as in the past, as an independent instrument in respect of the variation of pressure occurring in the course of a day. A comparative study of the differences between the readings of the barograph and of the standard barometer for a large number of years indicates that these differences maintain fairly constant values and do not show variations at different hours of the day. The mean of the excesses of the eye observations of the standard barometer made at 8 hrs. (B. M. T.) and 17 hrs. (I. S. T.) on seven consecutive days over the corresponding barograph tabulations has been applied as a common correction to all the tabulated hourly readings of the day which is the fourth of the seven.

3. *Standard Dry bulb and Wet bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was

*Magnetic, Meteorological and Seismographic observations made at the Government Observatories, Bombay and Alibag, 1922, p. 1.

found to have changed from 32°·6 to 33°·0 F. These thermometers were again tested on the 3rd February 1926 and their corrections were found to be the same as those determined in 1917. Besides the above, there are eye reading dry bulb, wet bulb, maximum and minimum thermometers installed in a standard Stevenson Screen. The heights of the bulbs of the thermometers above the ground in the two sheds are given below :—

Thermograph Shed ; Dry bulb 10′ ; Wet bulb 10′.

Stevenson Screen ; „ „ 4′ 4½″ ; „ „ 4′ 4″ ; Max. 4′ 11½″ ; Min. 4′ 4″.

For the results of comparative observations of these thermometers see p. 2 of the volume for the year 1924.

4. *Kew Dry bulb and Wet bulb Thermograph.*—The bulbs of these thermograph thermometers are placed close to those of the standard dry and wet bulb thermometers in a large double-louvre shed constructed in 1872, and the variation of temperatures is recorded photographically. The tables of air temperature have been obtained from the tabulations of dry bulb and of humidity from dry and wet bulb thermograms. The mean differences between the readings of the standard dry and wet bulb thermometers described in the preceding para. and the corresponding readings of the thermograms for the year 1932 were +0·2° and +0·1° respectively and were neglected.

5. *Robinson-Beckley's Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley and has been in uninterrupted use in the Observatory since 1867, except that a new instrument of the same pattern and by the same makers was installed in 1907 to replace the old one. It is erected on the Anemometer Tower with its cups at a height of 58 feet above the ground and 100 feet above the mean sea-level. The centres of each pair of opposite hemi-spherical cups are four feet apart, and the diameter of each of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

6. *Dines' Anemograph, 1924 (velocity and direction).*—The old Dines' anemograph which was in continuous operation from 1896 and was provided with velocity recorder only was stopped in December 1929. A new Dines' anemograph provided with both velocity and direction recorders by R. W. Munro and Co. was received in 1923 and installed on the Anemometer Tower in January 1924. With a view to get the best possible exposure, its modern type T-shaped head-vane was placed on the top of a telegraph post, 32·5 feet high, fixed on the Tower at a distance of 3 feet from the cups of the Robinson-Beckley's anemograph. The vane was therefore 27 feet above the level of Robinson-Beckley's cups and 127 feet above the mean sea-level. The diameter of the post near the Beckley's cups is 8 inches and it does not therefore exercise any appreciable influence on the records of Robinson-Beckley. This is due to the fact that in a current of air flowing past a fixed cylindrical obstacle, the stream lines, although they get deformed near the obstacle, assume again very nearly the original configuration at a distance from the obstacle equal to its diameter, and at this distance the velocity of the air current, too, attains almost its original value. The results of a series of comparisons of this instrument with a U-tube pressure-gauge showed that W, the difference in level of water in inches in the two arms of the U-tube, which is a measure of the pressure exerted by the wind, and V, the velocity of the wind in miles per hour as indicated in the charts, practically obey the standard law, namely, $W = \cdot 000731\ V^2$.

The height of the vane of this anemometer is 26 feet above that of the old Dines' anemometer. On account of this greater height, this instrument records a larger velocity of wind, and smaller gustiness; the types of records by the two instruments are however identical. The ratio of the mean wind velocities recorded by the new Dines' anemograph to those recorded by the Beckley's anemograph during 1924—32 is given below for the different months, seasons and the year :—

Ratio of Wind Velocities.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Means. October to February.	Means. March to May.	Means. June to September.	Means. Year.
New Dines to Rob. Beckley (1924-33.)	1·45	1·51	1·39	1·38	1·42	1·48	1·71	1·70	1·60	1·53	1·55	1·47	1·49	1·40	1·62	1·50

The hourly values of wind velocity and wind direction tabulated in this volume represent the averages of the Dines' records for periods of sixty minutes, from full hour to full hour of local mean time. The daily mean directions have been derived by converting the hourly velocity into N or S and E or W components and combining the mean components.

7. *Rain-gauge.*—Newman's rain-gauge, which has been in use since 1845, exposes for the collection of rain-drops at a height of four feet above the ground a circular surface of an average diameter of 12·035 inches, forming the tip of the funnel, which opens into a cylindrical vessel below, having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05 inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

8. *Photographic Rain-gauge.*—This instrument takes a continuous record of rainfall by photographing the head of a mercury column balancing the rainfall collected in a glass vessel, with an arrangement for syphon discharge when full. A full description of this instrument will be found in the introduction to the " Bombay Magnetical and Meteorological Observations, 1877 to 1878 ", page xlvi. For methods of reduction of pluviograph records, reference is made to the introduction to the " Bombay Magnetical, Meteorological and Seismographic Observations, 1916—20 ". The height of the receiving funnel of this instrument is 28 feet above the ground. On account of its greater height, the pluviograph gives a lower value for rainfall than that by Newman.

For comparative study a syphon rain-gauge by L. Casella, London, was installed in the enclosure of the standard Newman rain-gauge on the 12th June 1930, so that the receiving funnels of both were at the same height. It was removed to a separate enclosure on the 28th April 1931 and its receiving funnel was kept at the standard height of 30 inches above the ground surface.

Magnetic Instruments at Alibag.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. As explained on pages 1-2 of the Observatory volume for 1927, the sensitiveness of the vertical force magnetograph was increased eight-fold on the 7th August 1927 by introducing certain alterations in the mechanism for adjusting the position of the centre of gravity of the 'balance'. The instrument worked very satisfactorily throughout the year and furnished excellent records of the changes in the vertical force.

A declination magnetograph with high optical magnification (1cm.=3·43 minutes of arc) was constructed locally and installed in the ground floor room of the magnetometer building. It was in continuous action throughout the year. The records furnished by this instrument are identical with those obtained with the Watson declination magnetograph except that the variations are shown in a more conspicuous manner.

The maximum and minimum temperatures in the magnetograph room during 1933 are shown below in degrees Fahrenheit.

1933.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Maximum .	85·0	83·7	86·3	89·3	90·9	90·6	89·4	87·2	88·0	88·5	88·0	87·5	90·9
Minimum .	83·1	83·1	83·5	86·0	88·7	88·6	87·0	85·5	86·4	86·5	86·9	84·5	83·1

Two Eschenhagen variometers, one for horizontal force and the other for vertical force, are also installed in the magnetograph room and are read five times every day. A set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and Declination Magnetometer is installed in the ground-floor room of the magnetometer building as auxiliary eye-reading instruments. The eye observations were regularly plotted and were used mainly for a comparative study of the performance of the different instruments. The magnetograms have been used in deducing the tabulated results. The hourly tabulations represent the average values during one hour, centred at the full hours of Greenwich Mean Time.

The scale coefficients of the force magnetographs were obtained every fortnight from deflection observations performed on the instruments with deflectors, at distances of 100 cm. and 120 cm. in the case of H and at distances of 124·05 cm. and 148·6 cm. in the case of V magnetographs. The usual distribution coefficient $(1 + \frac{P}{r^2})$ was introduced in the formula for the computation of scale coefficients. It was found that the mean values of the factor in the case of H. F. magnetograph were for both

the distances equal to unity and in the case of V. F. magnetograph 1·11 and 1·08 for the nearer and the longer distances respectively. The value of the scale coefficient adopted for any month is the mean of the mean observed value for that month and those for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs in γ, where as usual, γ =0·00001 C. G. S. unit of force.

Instrument.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph	44·4	44·6	44·6	44·6	44·5	44·4	44·4	44·4	44·7	44·5	44·9	44·8
V. F. Magnetograph	12·9	12·8	13·1	13·4	13·7	13·6	13·3	12·9	13·1	13·3	13·6	13·6

The scale coefficient of the Watson declination magnetograph for 1 cm. of ordinate is 10′·28.

The temperature coefficient for the horizontal force magnetograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. unit for 1° Fr. The temperature coefficient of the vertical force magnetograph was found by similar experiments to be negligible as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effect. The above conclusions have been checked by an analysis of the observed monthly values of base lines* by means of the formula $B_t = B_m + \alpha (t - m)$, where B_t is the monthly mean value of the base line, uncorrected for temperature but corrected for the slow secular change caused by the loss of magnetic moment and other causes, t the mean temperature during the month, B_m the annual mean of the observed values of the base line, m the annual mean temperature of the magnetograph room, and α the temperature coefficient. Several years' data have been analysed in this manner. The mean value of α for H. F. based on the data for the years 1924-33 is ·000052 in C. G. S. unit for 1° F. The adopted value is thus seen to be smaller by about 30 per cent. than that obtained by this method, but no correction has been introduced in the reduction on account of this difference. For V. F. the value of α appears to be negligible.

Absolute Instruments.

Two magnetometers have been under regular observations during the period for obtaining the absolute values of horizontal force and declination. Magnetometer No. 7 by T. Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other instrument is Magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the magnetometer building, while instrument No. 3 with magnets No. 137 is observed on the first floor and with magnets No. 3 on the second floor. A pair of new magnets No. 7 with their constants determined at the Greenwich Magnetic Observatory (Abinger) was received from Messrs. Cooke, Troughton and Sims, Limited, and observations of Horizontal Force and Declination were taken every twelve weeks with these magnets and magnetometer No. 7 on the second floor throughout the year for comparative purposes. The results show very close agreement with those obtained with the old magnets No. 7.

The value of the correction, $\text{Log}_{10}(1+\frac{P}{r^2}+\frac{Q}{r^4})^{-1}$ used in the reduction of the horizontal force observations was obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The values of this correction for the different months of the year for the standard instrument at the deflection distance 22·5 cm. were as follows :—

January	.. 9·99297	May	.. 9·99314	September	.. 9·99319
February	.. 9·99299	June	.. 9·99318	October	.. 9·99318
March	.. 9·99306	July	.. 9·99323	November	.. 9·99315
April	.. 9·99313	August	.. 9·99322	December	.. 9·99318

Earth Inductor No. 41 by Schulze of Potsdam and galvanometer No. 200 by Plath are installed on specially constructed pillars in the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building. Both these instruments were in regular use.

*Memoirs of the India Meteorological Department, Vol. XXV, Part VII.

System of observation at Colaba.

From the beginning of 1929, the eye observations of the barometer and thermometers at 10 hrs. and 16 hrs. were stopped but continued to be taken at 8 hrs. An afternoon observation at 17 hrs., Indian Standard Time, was however introduced from the 15th November 1929.

The eye observations at 8 hrs. (local time) and 17 hrs. (Indian Standard Time) were taken in the following order :—

From 5 minutes to the hour to 2 minutes after the hour.	Extent and description of clouds, state of weather occasional phenomena and direction of the wind.
At 2 „ „ „	Thermograph standard thermometer, dry-bulb. Thermograph standard thermometer, wet-bulb.
At 3 „ „ „	Newman's rain-gauge (in wet season).
From 7 to 9 „ „	Newman's standard barometer No. 58 and attached thermometer. Newman's standard barometer No. 48 and attached thermometer (read at 8 hrs. only).
At 10 „ „ „	Thermometer attached to barograph (read at 8 hrs. only).

Observations of the extent and description of clouds, state of weather, occasional phenomena and rainfall (in wet season) were also taken at 6, 10 and 22 hrs. Observations with nephoscope were taken at $8\frac{1}{2}$, $12\frac{1}{2}$ and $16\frac{1}{2}$ hrs. every day. The maximum and minimum thermometers in the Stevenson Screen were read twice daily at 8 hrs. and 16 hrs.

During the monsoon months, Newman's rain-gauge was read daily at midnight in addition to the usual observations and the discharges of the syphon of the self-registering pluviograph were also read as often as required.

A Campbell-Stokes Sunshine recorder was installed on the balloon observation tower, and was brought into regular use from August 1925.

Observations of magnetic declination were made once every month at Colaba about the 15th of each month. The mean of the differences between the observed absolute values of declination at Colaba and Alibag, from 1906 to 1933, is 52′·8 and this agrees fairly well with the value obtained by the comparative observations taken at the two stations in the years, 1904 and 1905.

Time-supply service.

The electric clock in the Colaba Observatory controlling the drop of the time ball was duly regulated once every day by comparison with the standard sidereal clocks, two Riefflers and one Kullberg. Government chronometers, belonging to the Royal Indian Marine and the Royal Navy, were wound daily or twice a week as required and comparisons with the standard clock were made with sufficient frequency to render the instruments always ready for issue at call with well-determined rates.

Experience during the past few years showed that the time signals broadcasted from Bordeaux, Rugby and Nauen could be received at Bombay almost every day. Further observations of transits of stars were therefore no longer considered necessary. They were accordingly discontinued with effect from the 28th May 1928. The two transit instruments in the Observatory were, however, maintained in a condition such that they could be brought into use any time should the wireless signals fail to be received for any reason. Observations of rhythmic signals broadcasted from Bordeaux and Rugby were taken regularly during the year.

System of observation at Alibag.

Eye observations of the instruments mentioned below were taken daily, Sundays included, shortly before 6, 10, 14, 16 and 22 hrs. at the instants specified against them,

These instants have been chosen so that they may approach as nearly as possible to the full hour of Greenwich Mean Time, which corresponds to 51 mins. of local time.

At 15 minutes to the hour .	Declination Magnetometer and thermometer in the Magnetometer room.
„ 11 „ „ „ .	Eschenhagen's Vertical Force Variometer and attached thermometer.
„ 10 „ „ „ .	Watson's Vertical Force Magnetograph and attached thermometer.
„ 9 „ „ „ .	Watson's Declination Magnetograph.
„ 8 „ „ „ .	Watson's Horizontal Force Magnetograph and attached thermometer.
„ 7 „ „ „ .	Eschenhagen's Horizontal Force Variometer and attached thermometer.
„ 6 „ „ „ .	Thermograph and the standard thermometer in the Magnetograph room (read twice daily at 6 and 16 hrs. only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every four weeks as deflector at distances of 100 cm. and 120 cm. on the horizontal force magnetograph and at distances of 124·05 cm. and 148·6 cm. on the vertical force magnetograph were made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 3 as deflector were made once a month for the purpose of check work.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cm. on the Eschenhagen's horizontal force variometer, and at a distance of 75 cm. on the Eschenhagen's vertical force variometer, were also made once a fortnight.

Observations of absolute horizontal force were made with the Observatory standard instrument No. 7 and magnets No. 7 (old) on Wednesdays. Observations of absolute horizontal force were also taken with—

(1) the auxiliary magnetometer No. 3 and magnets No. 137 on Mondays every four weeks,
(2) the auxiliary magnetometer No. 3 and magnets No. 3, on Mondays every six weeks and with,
(3) the standard magnetometer No. 7 and magnets No. 7 (new) on Fridays once in twelve weeks.

Observations of absolute declination were made with the standard magnetometer No. 7 and magnet No. 7 (old) on Thursdays. Observations of declination were also taken for comparative study with—

(1) magnetometer No. 3 and magnet No. 137 on Thursday once in eight weeks,
(2) magnetometer No. 3 and magnet No. 3 on Thursday once in six weeks, and
(3) standard magnetometer No. 7 and magnet No. 7 (new) on Thursday once in twelve weeks.

Observations of inclination were made with the Schulze's Inductor, which is the Observatory standard instrument, and another inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays. Each of the two inductor instruments was ordinarily observed on alternate days, but for check work both the instruments were observed one after the other on Saturdays.

Transit observations of stars for the determination of time were made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity was lost of observing the sun or stars whenever visible. The adjustment of the transit instrument was frequently tested by reference to the fixed collimator mark and by level observations; the errors of collimation, level and azimuth were determined once every month except during the monsoon months. A complete observation of all the meteorological elements was taken at Alibag at 8 hrs. (local time) throughout the year.

General Review.

1. *Weather.*—The southwest monsoon rains commenced at Bombay on the 20th June and practically ended on the 20th October. The total rainfall recorded during the year amounted to 62·37″ and was 8·30″ below the normal of 72 years. The mean temperature of the year was 80°·4 which was 1°·1 above the normal. The greatest maximum temperature recorded was 99°·7 on the 15th March and the lowest minimum was 56°·5 on the 25th January. The mean temperature of all the months in the year was within 3° of the normal of the season. The mean velocity of wind during the year was 10·1 miles per hour. The greatest daily mean velocity was 22·7 miles per hour on the 17th May

and the lowest was 5·4 miles per hour on the 1st June. The greatest mean hourly velocity was 33 miles per hour on the 17th May while the velocity of a single gust of wind as recorded by the New Dines' anemometer reached 59 miles per hour on the 13th May.

2. *Magnetic conditions.*—The mean and the extreme values of the magnetic elements at Alibag during 1933 are given below along with the corresponding values for the previous twelve years :—

Year.	H						D						V						I
	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean
		Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.		
	γ	γ		γ		γ	′	′		′		′	γ	γ		γ		γ	° ′
1921	36935	37069	13th May.	36381	15th May.	688	15·9 E.	41·9 E.	15th May.	9·5 E.	7th July.	32·4	17227	17320	15th May.	17144	20th Jan.	176	25 0·3
1922	36946	37037	10th Mar.	36777	14th Sept.	260	12·6 E.	18·0 E.	16th Feb.	6·6 E.	31st Aug.	11·4	17293	17351	12th Aug.	17222	5th Apr.	129	25 5·0
1923	36985	37071	27th Nov.	36854	24th Mar.	217	8·9 E.	13·6 E.	26th Jan.	3·6 E.	24th Sept.	10·0	17372	17432	3rd July.	17270	25th Jan.	162	25 9·6
1924	37029	37142	16th Oct.	36854	10th June.	288	5·6 E.	10·5 E.	29th Jan.	0·4 E.	15th Sept.	10·1	17452	17514	26th Dec.	17379	19th Jan.	135	25 14·1
1925	37065	37170	9th Mar.	36899	28th Dec.	271	3·4 E.	8·2 E.	24th May	2·0 W.	4th Sept.	10·2	17527	17589	25th Dec.	17421	21st Jan.	168	25 18·5
1926	37079	37227	26th Jan.	36755	15th Apr.	472	0·8 E.	9·9 E.	15th Apr.	4·9 W.	24th Aug.	14·8	17590	17654	15th Oct.	17504	4th Jan.	150	25 22·7
1927	37119	37350	22nd Oct.	36802	12th Oct.	548	1·9 W.	6·0 E.	22nd July.	8·6 W.	21st Aug.	14·6	17650	17710	24th Sept.	17565	14th Sept.	145	25 25·9
1928	37152	37463	7th July.	36718	8th July.	745	3·8 W.	11·6 E.	8th July.	9·0 W.	19th Sept.	20·6	17698	17778	28th May.	17608	30th April.	170	25 28·3
1929	37209	37316	11th Aug.	36988	12th Mar.	328	5·9 W.	0·5 W.	16th Apr.	11·1 W.	5th Sept.	10·6	17736	17797	24th Nov.	17655	29th Jan.	142	25 29·1
1930	37253	37373	14th Oct.	37021	16th June.	352	8·0 W.	2·6 W.	31st May.	12·7 W.	25th Aug.	10·1	17777	17836	6th Oct.	17692	12th Jan.	144	25 30·6
1931	37323	37417	17th Oct.	37097	29th Oct.	320	10·5 W.	5·7 W.	15th Apr.	15·8 W.	30th June.	10·1	17806	17869	11th Nov.	17726	20th May.	143	25 30·3
1932	37364	37460	25th Nov.	37223	30th May.	237	12·7 W.	7·0 W.	30th May.	18·1 W.	23rd July.	11·1	17830	17895	5th Nov.	17756	29th April.	139	25 30·6
1933	37408	37486	18th Nov.	37206	1st May	280	14.5 W.	10·3 W.	1st May.	18°8 W.	27th July	8°5	17848	17913	16th Dec.	17759	18th May	154	25 30·4

The value of H has been steadily increasing since 1916. The increase from 1932 to 1933 is 44γ and is slightly greater than the average rate of increase, namely 42γ, during the last 10 years. Declination diminished during the year at a rate which is nearly the same as that during the last ten years. The vertical force showed, as usual, a gradual increase, but the inclination which was increasing at a gradually decreasing rate during the previous few years and came to a halt during the last year had almost the same value as in the previous year.

The following table gives the character figure assigned to each day according to the international scheme. In accordance with the De Bilt circular letter of 1924, the figures have been deduced from a study of the departure of each day's range from the normal range for the day supplemented by an eye examination of the magnetograms.

Month.	"0" days.	"1" days.	"2" days.	Mean character figure.
1933.				
January . .	3, 4, 5, 8, 9, 10, 11, 12, 13, 16, 17, 18, 21, 31	1, 2, 7, 14, 20, 23, 24, 25, 26, 27, 28, 29, 30	6, 15, 19, 22	0·68
February .	1, 3, 4, 5, 6,9, 10, 11, 13, 16, 17, 28	2, 7, 8, 12, 14, 15, 18, 20, 22, 25, 26, 27	19, 21, 23, 24	0·71
March . .	1, 4, 5, 6, 7, 9, 10, 15, 16, 30, 31	2, 3, 8, 11, 12, 13, 14, 17, 20, 21, 22, 23, 24, 25, 26, 28, 29	18, 19, 27	0·74
April . .	1, 2, 4, 6, 11, 12, 13, 14, 24, 25, 27, 28, 29	3, 5, 7, 8, 9, 10, 15, 16, 18, 19, 20, 21, 22, 23, 26, 30	17	0·60
May . . .	7, 8, 9, 10, 11, 12, 13 16, 17, 20, 21, 22, 23, 24, 25, 26, 28	2, 3, 4, 5, 6, 14, 15, 18, 19, 27,	1, 29, 30, 31	0·52
June . .	3, 4, 5, 6, 7, 9, 10, 11, 12, 15, 16, 17, 18, 22, 23, 24, 26, 30	1, 2, 8, 13, 14, 19, 20, 21, 25, 27, 28, 29		0·49
July . .	1, 2, 4, 5, 7, 12, 13, 14, 15, 16, 19, 20, 21, 22, 25, 28, 29, 30, 31	3, 6, 8, 10, 11, 17, 18, 24, 26, 27	9, 23	0·45
August . .	1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 16, 22, 25, 27, 28, 29, 30, 31	6, 13, 14, 15, 17, 18, 19, 20, 21, 23, 24, 26	5	0·45
September .	3, 4, 5, 6, 7, 12, 21, 22, 23, 24, 30	1, 2, 8, 10, 11, 14, 15, 16, 17, 18, 19, 20, 25, 26, 27, 28, 29	9, 13	0·73
October . .	1, 2, 3, 4, 16, 19, 20, 21, 22, 23, 27, 28, 29, 30, 31	5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 24, 25, 26		0·52
November .	1, 12, 13, 14, 15, 16, 17, 19, 22, 24, 25, 26, 29, 30	2, 3, 4, 5, 7, 8, 9, 10, 11, 18, 20, 21, 23, 27, 28	6	0·57
December .	1, 2, 8, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 30, 31	3, 4, 5, 6, 7, 10, 11, 18, 28, 29	9	0·39

The annual mean character figure, as assigned by the Observatory, to the year 1933 is 0·56, while that assigned to the year 1932 is 0·66 and to 1931, 0·58. The corresponding De Bilt figures are 0·64, 0·71 and 0·66 respectively. Both the international as well as the local characterisations therefore suggest that the year 1933 as a whole was less disturbed than the previous year. This is what is to be expected, as we have approached the year with minimum number of sunspots. March was the most active and December the most inactive month in the year.

Absolute observations and Base Line Values.

Declination.

Absolute observations of declination were made once a week on Thursdays with the standard magnetometer No. 7. For comparative purposes, an observation of declination was taken immediately afterwards with the auxiliary magnetometer, No. 3 as already indicated.

Base-line values are derived by converting the ordinates corresponding to absolute observations with instrument No. 7 and magnet No. 7 (old) into angles and subtracting the converted ordinates from the observed absolute declination. The values so obtained of the base-lines of the declination magnetograph denote westerly declination.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination base-line values, 1933.

(0° *plus* tabular minutes.)

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	′	′		′	′		′	′
January 5 .	69·9 W	70·0 W	May 4 .	69·4 W	69·2 W	September 7	68·2 W	68·4 W
„ 12 .	70·3	70·2	„ 11 .	69·3	69·2	„ 14 .	68·5	63·3
„ 19 .	70·0	70·1	„ 18 .	69·0	69·2	„ 21 .	68·2	68·2
„ 26 .	70·1	70·2	„ 25 .	69·0	69·0	„ 29 .	67·8	68·2
February 2 .	70·5	70·2	June 1 .	69·3	68·8	October 5 .	68·3	68·2
„ 9 .	70·3	70·2	„ 8 .	68·3	68·7	„ 12 .	68·5	68·1
„ 16 .	70·1	70·3	„ 15 .	68·4	68·6	„ 19 .	68·3	68·2
„ 23 .	70·2	70·3	„ 22 .	68·4	68·5	„ 26 .	67·7	68·1
March 2 .	70·2	70·3	„ 29 .	68·8	68·7	November 2 .	68·3	68·1
„ 9 .	70·7	70·3	July 6 .	68·6	68·7	„ 9 .	67·9	68·0
„ 16 .	70·3	70·3	„ 13 .	68·5	68·8	„ 16 .	68·1	68·0
„ 23 .	70·1	70·3	„ 20 .	68·4	68·8	„ 23 .	67·8	67·9
„ 30 .	70·2	70·1	„ 27 .	68·9	68·8	„ 30 .	67·8	67·8
April 6 .	70·0	69·9	August 3 .	68·8	68·7	December 7 .	67·7	67·8
„ 13 .	69·8	69·6	„ 10 .	68·2	68·6	„ 14	67·8	67·8
„ 20 .	69·4	69·5	„ 17 .	68·1	68·5	„ 21 .	68·0	67·8
„ 27 .	68·8	69·3	„ 24 .	68·2	68·3	„ 28 .	67·9	68·0
			„ 31	68·1	68·1			

Horizontal Force.

Absolute observations of horizontal force were made every week, on Wednesdays with the standard magnetometer No. 7 and magnets No. 7 (old). Observations with the auxiliary magnetometer No. 3 and magnets No. 3 or No. 137 were taken every six or four weeks on Mondays and also with magnetometer No. 7 and magnets No. 7 (new) on Fridays

once in twelve weeks as already indicated. A day's observations comprise a double set of vibration and deflection experiments at three distances, which for No. 7 are 22·5 cm., 30 cm. and 40 cm. In calculating the base-line values the mean of the observed values at all the three distances has been used.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 in terms of γ and subtracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to a uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking overlapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Horizontal force base-line values at 85° F., 1933.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 4	37,129	37,133	May 3	37,128	37,136	September 6	37,135	37,139
„ 11	136	134	„ 10	142	135	„ 13	137	138
„ 18	135	133	„ 17	141	138	„ 20	131	133
„ 25	133	133	„ 24	137	139	„ 27	137	134
			„ 31	143	139			
February 1	37,131	37,135	June 7	37,134	37,139	October 4	37,123	37,134
„ 8	133	134	„ 17	141	138	„ 11	140	137
„ 15	142	137	„ 21	143	137	„ 17	140	137
„ 21	134	138	„ 28	135	135	„ 25	145	139
March 1	37,145	37,137	July 5	37,127	37,132	November 1	37,134	37,138
„ 8	134	137	„ 12	126	128	„ 8	137	136
„ 15	132	139	„ 19	123	127	„ 15	133	135
„ 22	142	137	„ 26	129	128	„ 22	132	135
„ 29	144	139	August 2	37,132	37,128	„ 29	136	133
April 5	37,134	37,141	„ 9	129	131	December 6	37,138	37,134
„ 12	144	143	„ 16	130	136	„ 13	129	33
„ 19	139	135	„ 23	142	137	„ 20	134	131
„ 26	130	137	„ 30	150	139	„ 27	129	128

Vertical Force.

Dip observations with inductors were made every day in the year, with the exception of Sundays and holidays, each of the two instruments being observed on alternate days.

Base-line values are derived by expressing the mean ordinates of V. F. magnetograms corresponding to the inclination observations in terms of γ and subtracting the converted ordinate from the absolute vertical force obtained by multiplying the value of H. F. at the time by the tangent of inclination given by Inductor observations. Values derived from Inductor No. 108 are reduced to those derived from Inductor No. 41 (which is the Observatory standard) by applying the mean correction for the month deduced from the comparative observations taken on Saturdays of every week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by simple interpolation.

As already remarked the sensitiveness of the instrument increased eight times in consequence of the change introduced on the 7th August 1927 in the mechanism for altering the sensitiveness.

Vertical force base-line values, 1933.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	ϒ	ϒ		ϒ	ϒ		ϒ	ϒ
January 6 .	17,814	17,796	May 3 .	17,787	17,785	September 6 .	17,839	17,834
„ 11 .	800	798	„ 10 .	757	767	„ 13 .	812	823
„ 18 .	816	797	„ 17 .	795	769	„ 20 .	808	818
„ 25 .	756	756	„ 24 .	759	761	„ 27 .	833	824
			„ 31 .	813	811			
						October 4 .	17,797	17,814
February 1 .	73,814	17,796	June 7 .	17,778	17,783	„ 11 .	854	837
„ 8 .	790	799	„ 17 .	764	787	„ 17 .	782	790
„ 15 .	809	819	„ 21 .	828	797	„ 25 .	789	769
„ 21 .	787	802	„ 28 .	790	794	November 1 .	17,724	17,737
March 1 .	17,799	17,804	July 5 .	17,818	17,818			
„ 8 .	825	817	„ 12 .	778	792	„ 8 .	721	736
„ 15 .	857	832	„ 19 .	836	816	„ 15 .	805	789
„ 22 .	824	816	„ 26 .	796	800	„ 23 .	791	783
„ 29 .	776	783	August 2 .	17,818	17,819	„ 29 .	797	792
April 5 .	17,821	17,807	„ 9 .	857	841	December 6 .	17,827	17,813
„ 12 .	779	795	„ 16 .	849	839	„ 13 .	750	763
„ 19 .	776	779	„ 23 .	878	844	„ 20 .	849	836
„ 26 .	745	748	„ 30 .	837	832	„ 27 .	793	819

Seismographs.

Two Milne-Shaw Seismographs (N-S and E-W components), were in continuous action in the underground constant temperature room, and both gave excellent records of earthquakes and microseisms during the year. The earthquakes recorded by these instruments will be found tabulated towards the end of the volume. The locally constructed seismograph of the Omori type (N-S and E-W components) was kept in continuous operation during the year as an auxiliary instrument.

Magnetic Storms.

In plates I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base-line values and scale co-efficients are shown with each curve. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich Mean Time. Increasing ordinates for H. F. and V. F. curves mean increase in force, and for the declination curves decrease in westerly declination.

Atmospheric Electricity.

Observations of the variation in the potential gradient were continued during the year. A photographic electrograph by Cambridge Instrument Co., as described in the Journal of Scientific Instruments, Vol. V, May 1928, pages 145—152, was received in May 1930 and installed on the 13th June 1930 in the old Milne seismograph room. It was removed to a specially constructed room in the open space near the sea coast on the 28th February 1931 and its radium collector was exposed through a hole in the wall at a height of 168 cm. above ground and on undisturbed days at a distance of 40 cm. from the wall. The values of the potential gradient centred at every sixth hour of Greenwich mean time have been given in this volume.

S. C. ROY,
Meteorologist, Bombay.

Colaba Observatory, Bombay ;
The 25th September 1934.

Meteorological Tables

(Colaba Observatory)

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours (B. M. T.).													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	30·001	29·987	29·980	29·973	29·982	29·986	30·007	30·023	30·052	30·052	30·047	30·022	29·994	29·959
2	29·998	·982	·978	·960	·967	·971	29·996	·014	·050	·054	·052	·023	·991	·966
3	·994	·977	·969	·966	·979	·988	30·018	·044	·081	·086	·085	·064	30·036	30·008
4	30·033	30·016	30·005	·994	30·005	30·014	·041	·063	**·088**	·087	·082	·059	·025	·003
5	·033	·014	·000	·993	·005	·011	·033	·046	·074	·074	·075	·047	·016	29·976
6	·012	29·994	29·980	·973	29·978	29·982	·008	·029	·059	·062	·063	·036	·007	·980
7	29·998	·977	·959	·946	·953	·958	29·986	·009	·037	·033	·033	·006	29·978	·950
8	30·000	·989	·973	·967	·968	·970	·992	·013	·037	·043	·043	·018	·987	·959
9	·003	·987	·973	·950	·952	·952	·967	29·986	·007	·007	·006	29·979	·947	·909
10	29·963	·943	·938	·930	·924	·923	·940	·959	29·995	·007	·007	·981	·949	·922
11	·960	·941	·933	·919	·927	·921	·958	·978	30·011	·022	·027	30·007	·972	·935
12	·981	·968	·960	·948	·962	964	·989	30·005	·033	·035	·024	29·993	·961	·928
13	·954	·941	·936	·924	·930	·928	·954	29·967	29·995	29·996	29·992	·955	·924	·892
14	·925	·904	·894	·892	·910	·915	·945	·960	·993	30·000	·999	·973	·941	·923
15	·909	·891	·885	·883	·895	·901	·924	·946	·973	29·977	·965	·936	·902	·882
16	·925	·902	·892	·874	·872	·878	·910	·927	·949	·950	·954	·932	·916	·902
17	·933	·911	·909	·901	·908	·923	·949	·971	·995	·991	·975	·942	·910	·879
18	·893	·866	·876	·872	·895	·915	·964	·999	30·011	30·003	·990	·948	·912	·867
19	·881	·868	855	·851	·850	·861	·878	·889	29·914	29·911	·903	·877	·847	·820
20	·849	·841	·834	·824	·831	·831	·854	·869	·896	·903	·902	·871	·836	·809
21	·828	·813	·809	·803	·816	·827	·849	·864	·899	·902	·897	·867	·826	·787
22	·824	·811	·812	803	·818	·825	·848	·862	·899	·905	·908	·878	·842	·816
23	·831	·817	·816	·805	·816	·822	·856	·874	·911	·916	·918	·893	·867	·835
24	·864	·851	·849	·845	·851	·862	·896	·912	·945	·958	·954	·929	·903	·879
25	·905	·894	·888	·877	·882	·886	·910	·917	·945	·944	·939	·915	·881	·842
26	·847	·840	·842	·834	·850	·854	·879	·895	·929	·943	·941	·922	·893	·864
27	·881	·871	·863	·859	·870	·875	·895	·907	·940	·946	·945	·926	·904	·881
28	·922	·912	·907	·903	·904	·911	·931	·947	·977	·981	·974	·949	·923	·906
29	·927	·914	·909	·904	·915	·921	·950	·967	·998	·997	·994	·961	·926	·895
30	·947	·927	·914	·908	·924	·929	·955	·963	·994	·997	·987	·962	·934	·910
31	·948	·935	·930	·915	·925	·929	·951	·964	·998	30·007	30·006	·976	·936	·898
Mean .	29·934	29·919	29·912	29·903	29·912	29·917	29·943	29·960	29·990	**29·993**	29·990	29·963	29·932	29·903
Variation	+·004	—·011	—·018	—·027	—·018	—·013	+·013	+·030	+·060	**+·063**	+·060	+·033	+·002	—·027
Mean in milibars.	1013·64	1013·10	1012·87	1012·60	1012·87	1013·04	1014·00	1014·50	1015·60	**1015·70**	1015·60	1014·60	1013·57	1012·60
Variation in milibars.	+·14	—·37	—·61	—·91	—·61	—·44	+·44	+1·02	+2·03	**+2·13**	+2·03	+1·12	+·07	—·91

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1	29·948	29·931	29·924	29·917	29·923	29·930	29·948	29·965	29·995	30·000	29·998	29·969	29·936	29·908
2	·940	·923	·916	·904	·912	·919	·946	·957	·981	29·990	·986	·960	·926	·894
3	·930	·913	·898	·886	·894	·895	·918	·932	·966	·978	·971	·943	·919	·895
4	·923	·909	·890	·870	·878	·883	·909	·921	·947	·954	·955	·938	·916	·880
5	·945	·922	·918	·910	·924	·935	·958	·970	·998	**30·009**	30·006	·981	·949	·914
6	·931	·913	·908	·896	·906	·914	·933	·949	·974	29·988	29·984	·962	·932	·888
7	·904	·881	·869	·860	·874	·882	·905	·917	·949	·970	·967	·948	·914	·883
8	·909	·899	·889	·883	·894	·903	·926	·937	·975	·996	·993	·963	·937	·897
9	·896	·884	·880	·875	·890	·897	·927	·935	·963	·969	·958	·933	·903	·873
10	·873	·863	·846	·832	·844	·853	·876	·893	·918	·917	·911	·887	·871	·841
11	·871	·855	·840	·826	·833	·843	·865	874	·906	·908	·907	·889	·863	·834
12	·824	·815	·813	·814	·826	·832	·856	·872	·899	·906	·909	·886	·864	·830
13	·846	·828	·824	·822	·839	·849	·879	·893	·911	·909	·905	·881	·852	·823
14	·887	·877	·876	·873	·885	·887	·914	·928	·952	·956	·957	·938	·912	·877
15	·927	·912	·903	·890	·894	·896	·915	·926	·944	945	·936	·909	·885	·845
16	·856	·840	829	·820	·828	·837	·861	·865	·889	·889	·888	·866	·836	·806
17	·835	·816	·808	·795	·796	·809	·844	·853	·875	·877	·874	·858	·828	·802
18	·820	·802	·796	·796	·808	·818	·841	·858	·886	·884	·877	·855	·829	·798
19	·844	·828	·824	·828	·834	·832	·864	·874	·899	·906	·902	·877	·860	·838
20	·838	·828	·822	·812	·818	·827	·848	·866	·895	·900	·911	·896	·874	·854
21	·884	·869	·860	·848	·860	·862	·886	·898	·922	·930	·933	·902	·873	·832
22	·865	·853	·851	·848	·858	·864	·887	·901	·925	·927	·925	·903	·873	·833
23	·886	·872	·872	·866	·875	·876	·908	·916	·936	·936	944	·924	·904	·871
24	·886	·868	·862	·857	·876	·872	·912	·922	·946	·940	·936	·913	·906	·870
25	·886	·875	·876	·873	·888	·892	·912	·920	·949	·956	·956	·940	·914	·886
26	·897	·887	·885	·883	·901	·909	·945	·957	·987	·998	·997	·973	·965	·945
27	·960	·945	·932	·926	·927	·934	·956	·968	·997	·994	·989	·959	·928	·898
28	·900	·882	·866	·856	·862	·868	·888	·902	·936	·936	·936	·919	·902	·870
Mean .	29·890	29·875	29·867	29·859	29·870	29·876	29·901	29·913	29·940	**29·945**	29·943	29·920	29·895	29·864
Variation	+·005	—·010	—·018	—·026	—·015	—·009	+·016	+·028	+·055	**+·060**	+·058	+·035	+·010	—·021
Mean in milibars.	1012·20	1011·67	1011·44	1011·10	1011·50	1011·70	1012·53	1012·90	1013·90	**1014·07**	1014·00	1013·20	1012·37	1011·34
Variation in milibars.	+·17	—·34	—·61	—·88	—·51	—·30	+·54	+·95	+1·86	**+2·03**	+1·96	+1·19	+·34	—·71

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(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Hour (B. M. T.).										Mean.	Mean in milibars	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·945	29·939	29·951	29·958	29·983	29·995	30·014	30·013	30·013	30·000	29 995	1015·77	8 25	30·054	15 50	29·936	1
·948	·936	·945	·955	·978	·989	·010	007	·009	29·997	·991	15·63	9 5	·058	15 35	·934	2
·988	·980	·983	·990	30·007	30·023	·046	·043	·050	30·037	30·018	16·47	9 20	·092	2 40	·964	3
·977	·964	·979	·987	·009	·027	·053	·053	·052	·039	**·027**	**16·84**	9 20	**·096**	15 50	·958	4
·965	·949	·957	·962	29·988	·003	·021	·029	·033	·017	·013	16·30	8 55	·078	15 45	·946	5
·956	·937	·947	·952	.984	29·998	·016	·028	·019	·003	000	15·90	9 30	·066	15 58	·934	6
·933	·922	·938	·939	·970	·989	·007	·011	·014	·004	29·981	15·23	8 30	·041	15 5	·917	7
·939	·919	930	934	·957	·974	·009	·008	·012	·005	·985	15·37	9 55	·047	15 55	·915	8
·893	·885	·894	·900	·921	·943	29·970	29·974	29·979	29·965	956	14 40	9 2	·012	15 10	·882	9
·898	·879	·885	·888	921	·936	·971	·975	·979	·962	·945	14·07	10 15	·011	16 5	·875	10
·910	·895	·903	·910	·936	.953	·970	·972	·980	·975	·955	14·37	9 48	·035	16 5	·893	11
·904	·889	·894	·900	·925	·939	·970	·977	·974	·960	·962	14·57	9 25	·039	16 5	·887	12
·874	·864	·873	·876	·901	·919	·942	·941	·942	·930	·931	13·53	9 20	·001	15 40	·863	13
·902	·893	·904	·903	·919	·932	·948	·943	·942	·915	·932	13·57	9 15	·007	2 45	·887	14
871	·863	·880	·889	·913	·928	·946	·945	·947	·932	·916	13·00	9 25	29·985	15 50	·859	15
·888	·882	·895	·905	·926	·940	·955	·954	·960	·943	918	13·07	21 55	.966	3 52	·868	16
·869	·864	·874	·869	·892	·910	·924	·920	·917	·905	918	13·07	9 15	30·001	14 37	·861	17
·848	·845	·857	·866	·888	·891	·909	·915	·917	·893	910	12·80	7 55	·013	14 45	·839	18
·809	·804	·817	·826	·849	·862	·874	·866	·862	·847	·859	11·10	8 42	29·917	14 25	·801	19
·787	·780	·791	·800	·827	·834	·847	·843	·844	·830	·839	10·40	10 4	·909	15 7	·778	20
·779	**·767**	·776	·781	·805	·817	·832	·833	·834	824	**·826**	**10·00**	9 30	·906	16 0	**·764**	21
·800	·784	·788	·793	·823	·835	·860	·850	·846	·832	836	10·30	9 50	·913	16 5	·782	22
·819	·809	·827	·826	·849	·860	·882	·871	·877	·861	.852	10·87	9 30	·925	3 30	·801	23
·866	·857	·864	·857	·875	·886	·906	·907	·913	·903	·889	12·10	9 50	·967	2 15	·842	24
·820	·801	·802	·804	·831	·840	·861	·861	·866	·847	·873	11·60	8 52	·949	16 25	.797	25
·840	·828	·838	·843	·859	·877	·898	·907	·907	·890	876	11·70	9 50	·948	15 35	·826	26
·868	·863	·871	·880	·909	·929	·946	·945	·944	·931	·902	12·57	9 35	·953	3 50	·857	27
·886	·877	·883	·886	·917	·932	·952	·952	·952	·937	926	13·40	9 40	·987	14 30	·873	28
·882	·872	·882	·887	·920	·933	·962	·962	·963	·950	·933	13·60	8 40	30·003	15 50	·867	29
·894	·886	·897	·902	·933	·943	·963	·966	·967	·954	940	13·90	9 35	·002	15 45	·882	30
·875	·864	·874	·879	·908	·932	·961	·963	·962	·949	·937	13·74	9 50	·014	15 27	·862	31
29·885	**29·874**	29·884	29·889	29·914	29·928	29·949	29·949	29·951	29·937	29·930						Mean.
—·045	**—·056**	—·046	—·041	—·016	—·002	+·019	+·019	+·021	+·007							Variation.
1011·97	**1011·64**	1011·94	1012·10	1012·94	1013·47	1014·20	1014·20	1014·23	1013·74		1013·50					Mean milibars.
—1·52	**—1·90**	—1·56	—1·39	—·54	—·07	+·64	+·64	+·71	+·24							Variation in milibars.

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29·888	29·879	29·884	29·884	29·909	29·920	29·946	29·949	29·952	29·939	29·935	1013·67	9 25	30·004	15 45	29·876	1
·876	·866	·873	·877	·901	·918	·937	·932	·938	·933	·925	13·37	9 45	29·998	15 37	·862	2
·878	·864	·871	·875	·900	·915	·936	·939	·940	·929	·916	13·00	9 40	·980	15 55	·862	3
·866	·858	·870	·873	·900	·915	·947	·957	·959	·943	·911	12·83	21 57	·964	15 10	·854	4
·886	·877	·885	·891	·917	·924	·944	·945	·948	·938	**·937**	**13·74**	9 10	**30·010**	15 10	·874	5
·864	·852	·856	·853	·866	·881	·906	·914	·924	·909	·913	12·90	9 45	·002	15 0	·850	6
·865	·855	·865	·869	·888	·894	·919	·921	·919	·907	·901	12·53	9 50	29·975	15 52	·851	7
·875	·859	·864	·868	·891	·903	·919	·917	·921	·903	·913	12·90	9 47	30·007	15 50	·857	8
·853	837	·843	·843	·857	·864	·882	·886	·891	·879	·892	12·27	9 15	29·973	15 25	·835	9
·825	·813	·821	·824	·850	·860	·881	·879	·882	·871	·864	11·34	9 22	·925	15 58	·809	10
·804	·789	·807	·817	·832	·835	·862	·858	·851	·835	·850	10·80	9 16	·915	15 45	·786	11
·813	800	·804	·814	·841	·854	·863	·851	·857	·852	·846	10·70	9 54	·912	16 10	·794	12
·802	·796	·809	·818	·848	·863	·889	·888	·901	·889	·857	11·04	9 16	·917	15 20	·793	13
·865	·860	·868	·875	·908	·924	944	·940	·944	·933	·907	12·74	9 56	·962	15 15	·856	14
·825	·817	·822	·822	·845	·850	.872	·872	·876	·864	·883	11·90	9 40	952	15 45	·814	15
·794	·779	·789	·790	·811	·816	·839	·844	·848	·841	·836	10·30	9 50	·902	15 7	·775	16
·778	**·764**	·773	·774	·794	·806	·829	·831	·832	·822	**·820**	**09·80**	9 35	·886	15 52	**·760**	17
·785	·777	·793	·796	·822	·835	·854	·859	·856	·851	·829	10·10	8 55	·890	15 10	·774	18
·823	·807	·816	·817	·832	·838	·861	·862	·854	·842	·848	10·77	9 50	.916	15 55	·800	19
·834	·820	·819	·814	·830	·840	·865	·864	·876	·875	·851	10·83	10 45	·920	4 7	·800	20
·804	·784	·800	·796	·811	·821	·859	·868	·882	·871	·861	11·23	9 50	·942	15 52	731	21
·803	·791	·807	·818	·846	·864	·904	·908	·913	·899	·869	11·50	9 7	·929	15 35	.785	22
·860	·846	·848	·846	·860	·875	·904	·910	·912	·900	·889	12·10	10 30	·946	15 50	·836	23
·856	·837	·846	·842	·852	·863	·884	·884	·896	888	·884	11·94	9 30	·952	17 5	·834	24
·876	·862	·868	·866	·878	·888	·912	·904	·904	·896	899	12·50	9 30	·958	15 55	·858	25
·927	909	·907	·903	·920	·929	·955	·957	·971	·967	·936	13 70	9 50	30·007	2 25	·879	26
·870	·848	·862	·864	·878	888	·910	·918	·924	·913	·925	13 37	9 0	·000	15 55	·844	27
·844	·832	·836	·836	·852	·858	·884	·885	·892	881	·880	11·80	9 10	29·940	15 55	·822	28
29·844	**29·831**	29·839	29·842	29·862	29·873	29·897	29·898	29·902	29·892	29·885						Mean
—·041	**—·054**	—·046	—·043	—·023	—·012	+·012	+·013	+·017	+·007							Variation.
1010·64	**1010·13**	1010·40	1010·57	1011·27	1011·60	1012·44	1012·47	1012·57	1012·27		1011·97					Mean in milibars.
—1·39	**—1 83**	—1·56	—1·46	—·78	—·41	+·41	+·44	+·58	+·24							Variation in milibars.

MARCH. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·874	29·856	29·846	29·834	29·846	29·850	29·884	29·897	29·918	29·922	29·918	29·896	29·875	29·850
2	·850	·826	·817	·808	·815	·833	·864	·877	·895	·888	·884	·864	·841	·812
3	·845	·836	·830	·826	·839	·846	·879	·885	·920	·930	·930	·898	·880	·874
4	·900	·884	·878	·873	·883	·892	·920	·928	·950	**·957**	·956	·935	·918	·888
5	·884	·864	·858	·856	·861	·870	·894	·906	·925	·925	·922	·892	·864	·828
6	·844	·828	·822	·818	·828	·837	·863	·880	·906	·910	·900	·872	·844	·812
7	·847	·837	·832	·834	·837	·845	·865	·876	·908	·916	·910	·884	·864	·838
8	·875	·858	·851	·844	·850	·852	·877	·894	·924	·926	·921	·896	·872	·845
9	·851	·830	·820	·812	·824	·830	·859	·868	·889	·894	·895	·868	·839	·816
10	·815	·796	·789	·779	·784	·784	·799	·811	·831	·834	·843	·820	·792	·764
11	·831	·821	·815	·813	·825	·833	·863	·884	·909	·908	·913	·891	·863	·832
12	·875	·863	·857	·853	·873	·874	·901	·908	·834	·944	·940	·913	·889	·865
13	·874	·864	·856	·836	·850	·854	·878	·886	·911	·912	·923	·903	·886	·864
14	·872	·871	·880	·858	·851	·860	·883	·895	·916	·919	·920	·899	·879	·850
15	·853	·832	·825	·813	·815	·825	·864	·880	·916	·923	·925	·902	·881	·844
16	·891	·864	·852	·846	·854	·854	·884	·904	·934	·932	·941	·926	·903	·876
17	·892	·881	·883	·871	·878	·880	·896	·914	·944	·944	·944	·929	·897	·863
18	·851	·830	·828	·828	·845	·856	·883	·894	·911	·913	·917	·892	·862	·829
19	·847	·825	·827	·829	·849	·859	·885	·899	·928	·919	·908	·883	·856	·826
20	·867	·859	·851	·849	·871	·874	·902	·914	·933	·929	·929	·911	·894	·863
21	·899	·883	·871	·860	·863	·866	·889	·899	·913	·909	·913	·897	·873	·854
22	·852	·828	·814	·809	·808	·812	·836	·852	·874	·871	·868	·843	·822	·792
23	·795	·776	·774	·769	·775	·782	·804	·824	·846	·850	·855	·837	·818	·794
24	·814	·794	·793	·790	·803	·813	·844	·864	·890	·895	·889	·871	·845	·822
25	·860	·841	·828	·820	·830	·840	·866	·887	·908	·904	·907	·872	·850	·818
26	·847	·823	·813	·793	·798	·799	·813	·828	·849	·857	·865	·852	·820	·793
27	·821	·803	·797	·795	·808	·819	·847	·867	·896	·900	·901	·885	·866	·847
28	·876	·851	·852	·841	·851	·860	·883	·902	·931	·937	·949	·938	·918	·883
29	·926	·904	·884	·868	·873	·878	·905	·921	·938	·936	·938	·921	·898	·859
30	·857	·838	·822	·808	·818	·824	·855	·882	·900	·895	·893	·869	·845	·817
31	·839	·830	·824	·802	·814	·824	·842	·857	·879	·882	·887	·872	·860	·832
Mean .	29·859	29·842	29·837	29·827	29·836	29·843	29·868	29·883	29·907	29·909	**29·910**	29·888	29·865	29·837
Variation	+·007	—·010	—·015	—·025	—·016	—·009	+·016	+·031	+·055	+·057	**+·058**	+·036	+·013	—·015
Mean in milibars.	1011·10	1010·57	1010·34	1010·04	1010·30	1010·60	1011·47	1011·90	1012·74	1012·80	**1012·80**	1012·07	1011·37	1010·34
Variation in milibars.	+·24	—·34	—·51	—·85	—·54	—·30	+·54	+1·05	+1·86	+1·93	**+1·96**	+1·22	+·44	—·51

APRIL.

1	29·884	29·861	29·837	29·831	29·843	29·851	29·877	29·885	29·911	29·905	29·907	29·883	29·869	29·833
2	·832	·822	·810	·810	·824	·830	·860	·874	·890	·890	·894	·878	·860	·822
3	·800	·780	·772	·766	·780	·796	·821	·844	·874	·876	·874	·860	·838	·802
4	·786	·769	·760	·752	·750	·759	·800	·825	·835	·838	·836	·806	·783	·741
5	·769	·754	·745	·745	·748	·765	·794	·803	·830	·834	·838	·822	·800	·770
6	·759	·743	·734	·733	·748	·764	·792	·806	·827	·829	·840	·829	·813	·772
7	·762	·738	·734	·726	·742	·751	·778	·795	·830	·837	·842	·822	·804	·771
8	·757	·733	·722	·713	·721	·731	·758	·772	·799	·797	·804	·788	·765	·724
9	·746	·725	·713	·697	·705	·709	·729	·737	·761	·749	·751	·731	·711	·682
10	·753	·747	·757	·760	·785	·796	·827	·855	·893	·896	·896	·877	·864	·821
11	·820	·821	·812	·804	·814	·818	·836	·843	·868	·864	·863	·852	·845	·830
12	·832	·809	·817	·790	·807	·807	·835	·850	·872	·885	·892	·883	·859	·846
13	·813	·805	·797	·797	·813	·823	·851	·871	·894	·897	·907	·894	·885	·861
14	·846	·834	·826	·815	·822	·829	·846	·867	·890	·893	·891	·881	·868	·841
15	·809	·792	·789	·781	·793	·805	·833	·845	·869	·869	·867	·850	·839	·812
16	·839	·827	·828	·827	·840	·841	·864	·878	·898	·899	·902	·885	·863	·846
17	·841	·832	·832	·828	·842	·854	·883	·893	·909	·908	·892	·864	·826	·790
18	·798	·785	·774	·773	·789	·793	·811	·828	·846	·840	·828	·806	·777	·746
19	·783	·769	·761	·759	·765	·773	·805	·823	·829	·833	·829	·807	·783	·755
20	·797	·775	·765	·759	·771	·779	·803	·821	·845	·842	·833	·807	·785	·761
21	·797	·793	·786	·776	·788	·792	·812	·824	·849	·846	·852	·834	·810	·774
22	·774	·764	·756	·752	·768	·770	·788	·796	·820	·823	·830	·810	·792	·776
23	·790	·775	·773	·770	·786	·793	·819	·833	·861	·866	·871	·865	·858	·832
24	·840	·831	·823	·813	·829	·830	·854	·868	·897	·897	·895	·882	·871	·841
25	·827	·813	·802	·790	·805	·814	·839	·853	·868	·865	·867	·854	·835	·810
26	·852	·831	·821	·813	·821	·828	·854	·869	·898	·901	·905	·888	·874	·847
27	·847	·830	·834	·824	·846	·860	·892	·906	·926	·927	·930	·924	·912	·888
28	·893	·881	·879	·876	·890	·902	·926	·939	**·966**	·966	·966	·955	·937	·910
29	·908	·890	·876	·869	·876	·884	·910	·919	·936	·931	·938	·922	·905	·877
30	·871	·855	·854	·840	·848	·856	·874	·887	·898	·892	·896	·883	·868	·854
Mean .	29·814	29·799	29·793	29·786	29·799	29·807	29·832	29·847	29·870	29·870	**29·871**	29·855	29·837	29·808
Variation	·000	—·015	—·021	—·028	—·015	—·007	+·018	+·033	+·056	+·056	**+·057**	+·041	+·023	—·006
Mean in milibars.	1009·64	1009·10	1008·90	1008·60	1009·10	1009·34	1010·17	1010·74	1011·50	1011·50	**1011·53**	1010·97	1010·34	1009·37
Variation in milibars.	·00	—·51	—·71	—·95	—·51	—·24	+·61	+1·12	+1·90	+1·90	**+1·93**	+1·39	+·78	—·20

MARCH. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Hours. (B. M. T.).										Mean.	Mean in Milibars	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·818	29·806	29·812	29·814	29·834	29·844	29·862	29·860	29·864	29·857	29·860	1011·20	9 35	29·926	15 45	29·804	1
·787	·784	·796	·801	·812	·825	·850	·856	·859	·848	·837	10·34	8 57	·898	14 55	·780	2
·850	·835	·836	·832	·850	·864	·885	·888	·897	·896	·868	11·47	9 50	·936	3 35	·820	3
·874	·858	·863	·861	·878	·884	·897	·888	·902	·894	**·898**	**12·47**	9 50	**·964**	15 30	·855	4
·802	·778	·786	·786	·804	·818	·835	·843	·852	·848	·854	10·94	9 0	·928	16 45	·776	5
·794	·786	·792	·792	·810	·822	·848	·850	·854	·852	·840	10·50	9 25	·918	15 52	·783	6
·815	·802	·811	·815	·829	·840	·874	·882	·890	·885	·856	11·00	9 40	·922	15 30	·798	7
·822	·804	·806	·805	·814	·824	·852	·855	·864	·858	·858	11·07	9 34	·936	15 52	·802	8
·784	·762	·768	·768	·790	·798	·824	·837	·840	·824	·829	10·10	9 41	·902	16 40	·758	9
·753	·745	**·742**	·756	·775	·794	·830	·842	·842	·832	**·798**	**09·07**	9 50	·846	15 38	·740	10
·821	·806	·802	·806	·825	·847	·875	·879	·893	·874	·851	10·83	9 40	·915	16 15	·797	11
·840	·816	·815	·819	·839	·853	·881	·877	·883	·875	·874	11·64	8 52	·945	16 52	·803	12
·839	·817	·819	·830	·859	·880	·895	·898	·899	·887	·871	11·53	8 50	·926	15 40	·806	13
·826	·803	·801	·805	·831	·841	·868	·864	·874	·860	·864	11·34	9 22	·926	16 30	·800	14
·825	·815	·826	·826	·851	·859	·890	·893	·900	·887	·862	11·27	9 20	·943	4 2	·811	15
·858	·838	·835	·836	·858	·874	·902	·904	·907	·893	·882	11·87	8 55	·945	16 30	·832	16
·849	·818	·814	·807	·822	·828	·854	·856	·862	·849	·874	11·64	9 0	·945	17 50	·801	17
·803	·781	·785	·781	·796	·802	·836	·849	·863	·856	·845	10·67	9 15	·921	16 52	·774	18
·800	·786	·790	·794	·818	·830	·864	·874	·882	·876	·852	10·87	8 35	·932	16 5	·782	19
·841	·820	·820	·823	·851	·864	·897	·904	·915	·907	·879	11·80	8 30	·935	15 50	·809	20
·833	·813	·809	·809	·831	·840	·863	·865	·871	·861	·866	11·40	8 20	·915	16 3	·795	21
·770	·746	·748	·748	·766	·775	·797	·801	·809	·804	·810	09·50	8 35	·876	15 50	**·732**	22
·779	·760	·760	·763	·789	·801	·833	·837	·842	·820	·803	09·20	9 10	·860	16 40	·754	23
·806	·791	·799	·805	·834	·848	·869	·871	·879	·869	·837	10·34	9 0	·905	4 5	·785	24
·804	·784	·794	·792	·810	·814	·838	·845	·850	·844	·842	10·57	8 45	·910	15 58	·774	25
·782	·763	·764	·763	·787	·795	·826	·827	·832	·824	·813	09·60	10 5	·867	16 15	·757	26
·831	·811	·820	·816	·832	·831	·865	·869	·871	·871	·854	10·67	9 15	·903	3 55	·791	27
·861	·851	·857	·861	·869	·884	·915	·924	·931	·929	·890	12·20	9 50	·951	4 5	·839	28
·828	·809	·806	·797	·813	·820	·847	·856	·868	·862	·872	11·60	8 35	·940	17 30	·796	29
·800	·781	·778	·778	·794	·809	·839	·846	·851	·843	·835	10·27	8 15	·906	16 35	·770	30
·824	·806	·812	·807	·832	·845	·872	·880	·893	·880	·846	10·70	21 50	·894	3 45	·798	31
29·817	**29·799**	29·802	29·803	29·823	29·834	29·861	29·865	29·873	29·863	29·852						Mean.
—·035	**—·053**	—·050	—·049	—·029	—·018	+·009	+·013	+·021	+·011							Variation.
1009·74	**1009·10**	1009·17	1009·20	1009·90	1010·24	1011·23	1011·37	1011·60	1011·30		1010·87					Mean in milibars.
—1·19	**—1·79**	—1·69	—1·66	—·98	—·61	+·30	+·44	+·71	+·37							Variation in milibars

APRIL.

29·811	29·793	29·791	29·783	29·817	29·823	29·843	29·847	29·857	29·841	29·849	1010·80	8 45	29·919	16 55	29·775	1
·792	·766	·765	·772	·790	·796	·810	·818	·826	·812	·827	10·04	8 55	·896	16 25	·764	2
·780	·758	·757	·756	·771	·778	·792	·796	·810	·795	·803	09·20	9 5	·888	17 14	·752	3
·712	·693	·688	·684	·705	·715	·752	·773	·788	·780	·764	07·94	9 2	·845	17 6	·682	4
·744	·717	·714	·714	·731	·744	·776	·777	·778	·766	·770	08·10	8 40	·847	16 15	·712	5
·753	·731	·728	·723	·745	·757	·778	·778	·784	·772	·772	08·17	9 0	·842	17 0	·722	6
·750	·732	·730	·726	·746	·760	·786	·789	·792	·773	·771	08·13	9 30	·850	4 5	·724	7
·698	·676	·672	·667	·688	·700	·735	·751	·767	·754	·737	07·04	8 28	·806	17 10	·665	8
·659	·643	·643	**·641**	·669	·697	·735	·735	·747	·750	**·711**	**06·13**	8 15	·762	17 6	**·639**	9
·791	·765	·769	·775	·801	·811	·831	·833	·841	·829	·816	09·70	9 0	·907	2 11	·745	10
·808	·801	·794	·790	·802	·811	·840	·840	·844	·832	·827	10·04	8 47	·880	17 15	·786	11
·820	·796	·775	·760	·769	·792	·802	·810	·829	·827	·823	09·90	10 2	·892	17 2	·760	12
·849	·840	·844	·837	·844	·852	·864	·866	·873	·868	·852	10·87	9 45	·909	3 0	·793	13
·817	·796	·794	·790	·805	·812	·825	·825	·831	·817	·836	10·27	9 5	·899	17 18	·789	14
·801	·783	·789	·785	·816	·830	·853	·861	·867	·848	·824	09·94	21 55	·881	3 10	·779	15
·824	·803	798	·803	·824	·835	·861	·865	·865	·847	·848	10·77	8 40	·908	17 6	·796	16
·770	·758	·760	·764	·782	·782	·800	·816	·830	·814	·828	10·07	8 45	·912	16 10	·754	17
·722	·698	·690	·690	·706	·720	·756	·774	·798	·784	·772	08 17	8 48	·848	16 37	·684	18
·737	·717	·707	·711	·740	·759	·797	·821	·827	·809	·779	08·40	9 16	·835	16 26	·704	19
·745	·733	·734	·734	·757	·765	·783	·781	·795	·792	·782	08·47	8 36	·851	16 10	·731	20
·756	·738	·732	·732	·740	·759	·782	·782	·798	·784	·789	08·70	8 30	·854	16 50	·728	21
·753	·735	·733	·730	·756	·764	·787	·795	·808	·795	·778	08 37	9 39	·832	17 15	·728	22
·814	·796	·790	·790	·807	·814	·838	·845	·854	·845	·820	09·80	9 0	·872	3 42	·768	23
·815	·793	·783	·786	·806	·817	·835	·832	·842	·838	·838	10·37	9 5	·902	16 50	·780	24
·793	·780	·783	·787	·818	·831	·860	·868	·879	·864	·829	10·10	22 10	·880	16 32	·775	25
·823	·810	·803	·812	·840	·852	·866	·864	·868	·853	·850	10·80	9 0	·906	16 37	·800	26
·874	·861	·853	·851	·872	·877	·893	·900	·913	·899	·881	11·83	8 40	·934	3 27	·822	27
·887	·871	·868	·864	·885	·890	·916	·922	·929	·922	**·910**	**12·80**	8 55	**·974**	16 55	·862	28
·856	·838	·830	·826	·838	·848	·866	·878	·886	·878	·883	11·90	8 16	·946	17 5	·824	29
·830	·815	·812	·803	·820	·827	·861	·879	·907	·906	·860	11·20	22 55	·910	17 8	·799	30
29·786	29.768	29·764	**29·763**	29·783	29·794	29.817	29.824	29·834	29·823	29·814						Mean.
—·028	—·046	—·050	**—·051**	—·031	—·020	+·003	+·010	+·020	+·009							Variation.
1008·60	1008·07	1007·94	**1007.90**	1008·50	1008·94	1009·74	1009·94	1010·24	1009·90		1009·64					Mean in milibars.
—·95	—1·56	—1·69	**—1·73**	—1·05	—·68	+·10	+·34	+·68	+·30							Variation in milibars

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·898	29·885	29·877	29·872	29·877	29·884	29·901	29·911	29·930	**29·936**	29·931	29·917	29·898	29·870
2	·887	·869	·859	·851	·853	·861	·890	·902	·920	·913	·899	·877	·854	·823
3	·821	·803	·790	·783	·799	·819	·840	·854	·865	·859	·852	·839	·819	·789
4	·827	·816	·816	·812	·823	·829	·854	·867	·889	·892	·889	·881	·865	·843
5	·868	·862	·854	·852	·862	·867	·888	·900	·917	·913	·914	·894	·869	·831
6	·829	·810	·806	·804	·817	·819	·846	·864	·886	·883	·877	·857	·838	·812
7	·794	·762	·754	·749	·762	·772	·794	·807	·826	·832	·839	·830	·828	·802
8	·811	·801	·787	·780	·794	·815	·835	·850	·872	·868	·862	·847	·829	·800
9	·829	·808	·804	·791	·805	·812	·836	·855	·875	·872	·863	·840	·819	·787
10	·759	·742	·737	·731	·753	·771	·788	·791	·823	·806	·798	·771	·744	·720
11	·761	·742	·732	·727	·733	·732	·749	·760	·773	·774	·777	·756	·742	·715
12	·768	·751	·759	·746	·742	·766	·801	·819	·837	·845	·859	·846	·826	·798
13	·823	·809	·803	·798	·807	·819	·832	·844	·859	·871	·869	·843	·821	·793
14	·800	·790	·800	·790	·795	·797	·815	·825	·853	·849	·836	·813	·800	·765
15	·838	·835	·816	·796	·791	·792	·810	·815	·827	·814	·818	·806	·793	·773
16	·775	·761	·751	·740	·746	·748	·767	·772	·790	·784	·772	·756	·745	·742
17	·729	·688	·675	·667	.679	·674	·693	·695	·715	·710	·707	·691	·687	·666
18	·677	·657	·656	·652	·662	·663	·694	·707	·721	·719	·719	·709	·697	·693
19	·709	·692	·680	·674	·692	·703	·722	·727	·750	·751	·755	·746	·724	·702
20	·710	·688	·680	·676	·686	·688	·712	·730	·744	·742	·746	·730	·711	·694
21	·725	·711	·705	·702	·711	·719	·745	·756	·773	·771	·767	·761	.745	·717
22	·747	·739	·727	·726	·730	·736	·765	·784	·807	·810	·810	·797	·778	·751
23	·749	·731	·725	·720	·729	·731	·753	·767	·785	·783	·789	·776	·753	·729
24	·736	·715	·707	·693	·693	·689	·707	·708	·714	·717	·719	·711	·695	·669
25	·663	·644	·639	·637	·644	·642	·665	·675	·691	·686	·691	·679	·662	·640
26	·622	·605	·593	·583	·589	·597	·621	·633	·652	·653	·655	·639	·622	·599
27	·646	·630	·623	·623	·636	·641	·668	·686	·702	·704	·710	·700	·697	·675
28	·720	·707	·702	·693	·707	·711	·740	·746	·753	·751	·740	·716	·684	·656
29	·695	·687	·665	·642	·654	·666	·686	·679	·672	·665	·668	·655	.642	·622
30	·596	·590	·591	·595	·599	·604	·610	·611	·615	·609	61	·608	·592	·576
31	·571	·564	·556	·552	·561	·566	·578	·598	·606	·611	·609	·601	·586	·566
Mean .	29·754	29·739	29·731	29·724	29·733	29·740	29·761	29·772	**29·788**	29·787	29·786	29·771	29·754	29·730
Variation.	+·011	—·004	—·012	—·019	—·010	—·003	+·018	+·029	**+·045**	+·044	+·043	+·028	+·011	—·013
Mean in milibars.	1007·54	1007·10	1006·83	1006·54	1006·90	1007·10	1007·83	1008·17	**1008·67**	1008·64	1008·60	1008·13	1007·54	1006·80
Variation in milibars.	+·37	—·14	—·41	—·64	—·34	—·10	+·61	+·98	**+1·52**	+1·49	**+1·46**	+·95	+·37	—·44

JUNE.

1	29·611	29·594	29·592	29·587	29·594	29·606	29·638	29·645	29·659	29·661	29·667	29·657	29·642	29·624
2	·680	·663	·647	·643	·657	·668	·696	·708	·722	·726	·732	·723	·715	·693
3	·735	·719	·722	·717	·738	·738	·762	·774	·790	·802	·806	·792	·778	·758
4	·753	·734	·719	·708	·705	·705	·725	·734	·764	·765	·766	·756	·738	·710
5	·710	·693	·686	·682	·696	·702	·720	·729	·752	·752	·758	·745	·727	·704
6	·739	·715	·706	·700	·710	·722	·748	·755	·772	·775	·779	·787	·757	·741
7	·766	·748	·742	·739	·752	·761	·788	·797	**·810**	·808	·810	·797	·779	·770
8	·733	·707	·703	·693	·696	·698	·728	·738	·766	·760	·762	·748	·730	·708
9	·708	·688	·678	·670	·683	·681	·708	·721	·742	·743	·752	·740	·726	·724
10	·741	·724	·717	·718	·728	·729	·756	·765	·781	·779	·792	·784	·771	·748
11	·751	·725	·720	·715	·721	·725	·647	·757	·776	·777	·778	·771	·754	·751
12	·738	·724	·717	·714	·719	·719	·743	·751	·767	·765	·769	·755	·747	·724
13	·716	·701	·701	·693	·699	·705	·730	·730	·745	·740	·746	·730	·727	·707
14	·695	·682	·675	·663	·666	·665	·676	·677	·691	·687	·690	·677	·676	·661
15	·643	·620	·618	·612	·614	·610	·639	·645	·667	·669	·767	·652	·646	·614
16	·642	·632	·617	·606	·611	·612	·640	·649	·669	·669	·668	·655	·647	·621
17	·607	·593	·585	·577	·581	·588	·613	·621	·640	·635	·630	·617	·604	·585
18	·607	·580	·563	·553	·552	·555	·577	·588	·602	·603	·596	·585	·567	·555
19	·546	·522	·526	·528	·547	·554	·570	·583	·593	·579	·571	·556	·538	·516
20	·521	·498	·496	·496	·506	·502	·540	·542	·568	·568	·577	·568	·553	·542
21	·592	·575	·577	·564	·578	·564	·567	·568	·592	·592	·600	·591	·580	·582
22	·587	·577	·563	·548	·557	·557	·565	·569	·583	·580	·580	·576	·569	·556
23	·595	·578	·577	·576	·589	·594	·613	·627	·645	·652	·671	·659	·646	·630
24	·648	·641	·625	·617	·617	·622	·643	·649	·674	·685	·693	·685	·681	·668
25	·653	·637	·634	·626	·625	·635	·652	·655	·680	·686	·695	·692	·687	·684
26	·683	·664	·664	·654	·658	·662	·664	·681	·692	·696	·697	·694	·693	·686
27	·664	·632	·626	·623	·636	·638	·661	·658	·677	·679	·684	·678	·678	·670
28	·651	·632	·627	·623	·629	·630	·647	·648	·654	·658	·668	·661	·651	·639
29	·637	·613	·606	·596	·596	·602	·632	·640	·651	·652	·658	·647	·630	·612
30	·584	·560	·554	·541	·542	·543	·565	·571	·591	·598	·602	·595	·590	·568
Mean .	29·665	29·646	29·639	29·633	29·640	29·643	29·665	29·673	29·691	29·691	**29·695**	29·685	29·674	29·658
Variation.	+·005	—·014	—·021	—·027	—·020	—·017	+·005	+·013	+·031	+·031	**+·035**	+·025	+·014	—·002
Mean in milibars.	1004·57	1003·90	1003·70	1003·50	1003·70	1003·80	1004·57	1004·80	1005·43	1005·43	**1005·57**	1005·27	1004·84	1004·27
Variation in milibars.	+·17	—·47	—·71	—·91	—·68	—·58	+·17	+·44	+1·05	+1·05	**+1·19**	+·85	+·47	+·07

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Hours (B. M. T.)										Mean.	Mean in milibar.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
												H. M.		H. M		
29·845	29·825	29·827	29·837	29·863	29·881	29·891	29·900	29·907	29·895	**29·886**	**1012·00**	8 50	**29·940**	16 20	29·822	1
·795	·784	·782	·783	·803	·805	·825	·831	·835	·834	·847	10·74	8 45	·924	17 5	·776	2
·769	·751	·750	·751	·769	·783	·811	·823	·835	·827	·808	09 37	8 30	·866	16 58	·747	3
·831	·808	·895	·817	·831	·837	·866	·876	·892	·877	·848	10·77	9 0	·896	16 28	·794	4
·810	·787	·778	·789	·805	·820	·847	·852	·853	·839	·853	10·90	8 45	·919	16 15	·770	5
·781	·758	·761	·761	·783	·797	·817	·825	·832	·816	·820	09·89	8 10	·891	17 25	·751	6
·783	·769	·772	·770	·782	·795	·821	·827	·836	·825	·797	09·04	9 35	·845	3 50	·749	7
·779	·766	·761	·761	·779	·798	·819	·830	·845	·836	·814	09·64	8 50	·879	17 15	·759	8
·766	·738	·715	·708	·729	·738	·776	·781	·781	·771	·796	09·00	9 0	·881	17 30	·703	9
·695	·680	·686	·696	·726	·739	·751	·761	·774	·769	·750	07·40	8 21	·825	16 10	·675	10
·701	·686	·672	·680	·728	·738	·756	·768	·778	·780	·740	07·10	9 5	·782	17 5	·663	11
·782	·776	·764	·758	·781	·784	·807	·820	·843	·841	·797	09·04	9 50	·863	4 15	·736	12
·765	·734	·746	·755	·776	·776	·828	·840	·815	·803	·810	09·50	9 15	·876	16 5	·726	13
·753	·735	·722	·729	·763	·786	·802	·802	·831	·819	·795	08·97	8 49	·860	16 15	·712	14
·761	·745	·748	·747	·755	·768	·790	·792	·798	·786	·792	08·87	8 15	·839	17 55	·742	15
·740	·724	·739	·756	·774	·763	·770	·763	·772	·754	·759	07·70	8 12	·792	15 35	·712	16
·662	·640	643	·639	·647	·656	·686	·686	·697	·688	·680	05·10	0 5	·744	18 5	·638	17
·678	·658	·655	·660	·682	·684	·711	·717	·724	·714	·688	05·37	21 10	·726	3 50	·644	18
·680	·676	·678	·673	·687	·697	·717	·726	·732	·722	·709	06·00	9 7	·756	3 40	·672	19
·679	·670	·666	·666	·677	·688	·707	·721	·737	·729	·703	05·80	9 3	·752	17 5	·662	20
·698	·687	·688	·691	·713	·725	·744	·754	·767	·758	·731	06·83	8 37	·777	17 0	·684	21
·723	·706	·692	·694	·707	·719	·746	·756	·768	·758	·749	07·40	9 10	·814	16 50	·686	22
·709	·690	·683	·681	·694	·704	·728	·742	·743	·739	·735	06·97	9 48	·791	17 0	·677	23
·648	·620	·615	·618	·635	·641	·670	·675	·683	·672	·681	05·13	0 4	·739	16 21	·607	24
·620	·596	·583	·585	·603	·608	·624	·633	·641	·629	·641	03·73	8 48	·693	16 50	·577	25
·578	·564	·566	·568	·594	·606	·635	·642	·653	·647	·613	02 80	9 11	·657	16 5	·555	26
·664	·641	·640	·638	·659	·678	·703	·716	·744	·731	·673	04·80	22 26	·745	3 20	·619	27
·635	·622	·632	·631	·672	·675	·692	·715	·722	·707	·697	05·64	7 50	·760	16 30	·620	28
·594	·557	·567	·575	·602	·610	·627	·626	·631	·616	·638	03·67	6 40	·688	15 58	·556	29
·546	**·519**	·521	·538	·560	·583	·607	·596	·591	·575	**·585**	**01·87**	7 35	·619	16 30	**·508**	30
·563	·552	·550	·560	·595	·608	·629	·633	·637	·625	·587	01·94	20 47	·643	16 5	·543	31
29·711	29·692	**29.691**	29·694	29·715	29·725	29·748	29·756	29·764	29·754	29·743						Mean.
—·032	—·051	**—·052**	—·049	—·028	—·018	+·005	+·013	+·021	+·011							Variation.
1006·13	1005·47	**1005·43**	1005·54	1006·27	1006·57	1007·37	1007·60	1007·94	1007·54		1007·20					Mean in milibars.
—1·08	—1·73	**—1·76**	—1·66	—·95	—·61	+·17	+·44	+·71	+·37							Variation in milibars.

JUNE.

29·603	29·596	29·599	29·606	29·631	29·642	29·668	29·681	29·690	29·684	29·632	1003·47	22 10	29·693	4 15	29·584	1
·679	·666	·676	·682	·704	·722	·744	·746	·760	·746	·700	05·70	21 56	·763	4 10	·640	2
·741	·717	·718	·728	·745	·758	·790	·790	·797	·780	·758	07·67	9 50	·808	16 10	·710	3
·692	·671	·670	·671	·692	·708	·728	·730	·739	·728	·721	06·43	9 4	·768	16 15	·664	4
·692	·682	·685	·695	·712	·725	·745	·753	·764	·752	·719	06·40	22 25	·766	3 20	·676	5
·734	·721	·725	·731	·746	·755	·775	·782	·785	·775	·746	07·30	21 20	·790	4 0	·696	6
·746	·726	·722	·721	·730	·734	·752	·753	·765	·748	**·761**	**07·83**	8 56	**·812**	17 20	·719	7
·691	·673	·668	·669	·688	·690	·716	·720	·730	·717	·714	06·24	8 30	·768	17 15	·666	8
·711	·697	·693	·692	·712	·725	·742	·752	·757	·748	·716	06·30	21 35	·762	4 5	·668	9
·733	·715	·718	·709	·732	·738	·749	·758	·774	·758	·747	07·34	9 0	·794	17 40	·708	10
·735	·727	·718	·709	·718	·724	·736	·744	·757	·750	·741	07·13	8 50	·781	17 35	·702	11
·709	·695	·691	·688	·703	·711	·726	·727	·739	·727	·728	06·67	8 20	·773	16 50	·685	12
·695	·683	·676	·671	·679	·685	·710	·717	·722	·711	·709	06·00	8 25	·751	17 30	·667	13
·647	·617	·611	·607	·629	·643	·672	·689	·702	·675	·666	04·60	21 45	·705	16 45	·601	14
·596	·587	·589	·595	·602	·612	·641	·649	·661	·649	·629	03·30	9 30	·679	16 5	·583	15
·606	·592	·573	·570	·589	·606	·629	·636	·637	·612	·625	03·17	8 50	·671	17 10	·566	16
·574	·564	·551	·556	·583	·623	·631	·626	·622	·618	·601	02·43	8 30	·643	15 55	·548	17
·550	·535	·527	·525	·547	·555	·567	·575	·586	·576	·568	01·27	9 30	·608	16 20	·515	18
·500	·473	**·467**	·481	·494	·518	·550	·553	·557	·537	**·536**	**00·20**	8 0	·595	16 55	**·463**	19
·544	·536	·514	·518	·548	·566	·592	·594	·603	·591	·545	00·47	22 15	·606	2 50	·492	20
·566	·554	·532	·537	·555	·567	·604	·611	·624	·604	·578	01·57	22 10	.638	16 50	·530	21
·545	·536	·541	·543	·570	·578	·597	·604	·620	·609	·571	01·33	22 15	·623	16 15	·532	22
·616	·603	·602	·596	·624	·634	·654	·665	·667	·651	·623	03·10	21 50	·670	3 0	·574	23
·650	·629	·636	·637	·651	·657	·680	·687	·682	·666	·655	04·17	9 30	·697	5 25	·607	24
·665	·650	·654	·655	·665	·678	·695	·697	·696	·694	·667	04·64	21 20	·701	3 55	·623	25
·672	·648	·646	·644	·652	·660	·674	·676	·676	·668	·671	04·73	9 0	·702	17 45	·641	26
·657	·638	·618	·617	·627	·638	·666	·664	·675	·668	·653	04·10	10 30	·690	16 30	·610	27
·617	·602	·591	·589	·609	·617	·643	·649	·663	·647	·635	03·57	11 15	·673	16 45	·585	28
·600	·578	·565	·558	·568	·570	·586	·586	·602	·591	·607	02·64	10 5	·662	18 15	·554	29
·558	·535	·535	·535	·553	·564	·584	·588	·593	·587	·568	01·27	9 40	·606	17 0	·530	30
29·644	29·628	**29·624**	29·625	29·642	29·653	29·675	29·680	29·688	29·676	29·660						Mean.
—·016	—·032	**—·036**	—·035	—·018	—·007	+·015	+·020	+·028	+·016							Variation.
1003·84	1003·27	**1003·14**	1003·17	1003·77	1004·10	1004·87	1005·10	1005·37	1004·90		1004·40					Mean in milibars
—·54	—1·08	**—1·22**	—1·19	—·61	—·24	+·51	+·68	+·95	+·54							Variation in milibars.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32°F.)

Date.	Hours. (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·578	29·563	29·560	29·553	29·565	29·572	29·594	29·607	29·631	29·641	29·651	29·641	29·635	29·629
2	·632	·616	·616	·614	·627	·633	·656	·669	·697	·703	·703	·694	·683	·665
3	·673	·659	·647	·639	·635	·665	·685	·695	·724	·724	·719	·704	·691	·680
4	·666	·645	·634	·622	·627	·629	·659	·665	·681	·681	·689	·681	·667	·645
5	·659	·641	·634	·627	·628	·631	·642	·648	·661	·666	·671	·666	·656	·642
6	·667	·648	·643	·635	·642	·645	·669	·678	·700	·703	·711	·704	·699	·685
7	·704	·688	·682	·674	·683	·687	·704	·719	·730	·732	·733	·728	·717	·706
8	·716	·689	·674	·669	·673	·678	·697	·705	·714	·717	·717	·709	·695	·672
9	·676	·655	·649	·644	·648	·653	·674	·688	·705	·706	·708	·701	·691	·683
10	·708	·690	·682	·677	·687	·695	·726	·734	·747	·750	·748	·738	·735	·714
11	·710	·695	·693	·691	·694	·697	·725	·735	·751	·751	·753	·742	·734	·720
12	·717	·695	·689	·683	·693	·695	·711	·715	·734	·731	·729	·715	·703	·681
13	·687	·665	·659	·651	·654	·660	·680	·692	·719	·710	·713	·701	·682	·668
14	·675	·654	·639	·624	·632	·630	·648	·654	·672	·672	·666	·652	·640	·620
15	·604	·587	·582	·567	·567	·565	·580	·585	·600	·601	·604	·602	·593	·570
16	·545	·526	·518	·514	·518	·522	·541	·546	·560	·559	·563	·554	·546	·538
17	·590	·580	·568	·556	·560	·567	·590	·604	·627	·633	·546	·638	·634	·642
18	·627	·609	·604	·595	·609	·608	·631	·647	·668	·670	·683	·677	·673	·653
19	·653	·634	·626	·613	·615	·615	·636	·647	·675	·669	·675	·669	·654	·651
20	·692	·676	·670	·666	·681	·681	·709	·723	·747	·748	·758	·752	·747	·738
21	·802	·792	·782	·776	·783	·788	·813	·824	·836	·842	·848	·842	·840	·828
22	·829	·812	·812	·808	·814	·809	·826	·836	·850	·852	**·869**	·853	·837	·818
23	·786	·763	·752	·740	·744	·738	·750	·756	·764	·764	·769	·756	·744	·723
24	·703	·682	·667	·654	·659	·661	·677	·680	·695	·697	·702	·694	·688	·675
25	·641	·624	·621	·618	·634	·632	·659	·678	·703	·712	·709	·702	·695	·690
26	·688	·667	·657	·652	·659	·659	·675	·684	·709	·710	·707	·699	·697	·679
27	·683	·659	·646	·634	·633	·640	·663	·671	·693	·694	·695	·692	·679	·666
28	·717	·703	·688	·677	·677	·681	·705	·711	·734	·735	·739	·721	·718	·703
29	·704	·677	·654	·642	·641	·649	·675	·683	·707	·705	·703	·687	·673	·653
30	·651	·631	·617	·609	·619	·624	·645	·647	·663	·667	·673	·667	·651	·631
31	·629	·601	·595	·587	·595	·608	·632	·643	·667	·668	·671	·664	·649	·631
Mean .	29·678	29·659	29·650	**29·642**	29·649	29·652	29·673	29·683	29·702	29·704	**29·707**	29·698	29·689	29·674
Variation	+·004	—·015	—·024	**—·032**	—·025	—·022	+·001	+·009	+·028	+·030	**+·033**	+·024	·015	·000
Mean in milibars.	1004·97	1004·30	1004·00	**1003·77**	1004·00	1004·07	1004·80	1005·20	1005·77	1005·84	**1005·94**	1005·67	1005·40	1004·84
Variation in milibars.	+·14	—·51	—·81	**—1·08**	—·85	—·75	—·03	+·30	+·95	+1·02	**+1·12**	+·81	+·51	·00

AUGUST.

1	29·619	29·604	29·594	29·585	29·589	29·593	29·611	29·613	29·633	29·633	29·639	29·625	29·623	29·607
2	·624	·603	·595	·587	·603	·607	·632	·639	·655	·656	·655	·637	·617	·599
3	·583	·568	·552	·540	·551	·551	·577	·591	·607	·616	·619	·611	·605	·575
4	·568	·549	·539	·532	·533	·533	·561	·575	·602	·605	·611	·603	·592	·569
5	·592	·576	·568	·560	·576	·582	·612	·618	·651	·654	·656	·654	·654	·642
6	·657	·643	·637	·630	·636	·640	·666	·674	·686	·689	·688	·680	·668	·653
7	·660	·647	·640	·628	·627	·624	·647	·655	·675	·678	·682	·675	·675	·658
8	·664	·647	·641	·632	·639	·636	·655	·666	·689	·692	·700	·693	·687	·673
9	·693	·672	·658	·654	·657	·665	·697	·710	·728	·725	·726	·719	·715	·709
10	·715	·698	·684	·671	·667	·671	·683	·688	·698	·698	·699	·692	·678	·658
11	·650	·632	·622	·612	·620	·621	·648	·666	·696	·700	·701	·692	·690	·680
12	·780	·764	·761	·756	·774	·782	·807	·817	·843	·845	·856	·845	·841	·823
13	·862	·842	·846	·839	·840	·846	·875	·881	·906	·904	**·908**	·906	·886	·859
14	·822	·810	·797	·786	·792	·793	·822	·824	·842	·836	·841	·830	·812	·800
15	·784	·759	·754	·748	·760	·763	·783	·790	·815	·814	·818	·812	·800	·786
16	·769	·750	·729	·722	·724	·734	·762	·778	·805	·811	·814	·806	·788	·766
17	·783	·767	·759	·761	·765	·770	·794	·802	·827	·829	·835	·824	·807	·789
18	·821	·801	·794	·779	·793	·799	·819	·833	·860	·859	·861	·849	·829	·814
19	·789	·765	·755	·757	·774	·773	·791	·795	·815	·815	·818	·811	·787	·762
20	·751	·743	·724	·716	·723	·723	·749	·757	·779	·782	·783	·778	·759	·736
21	·745	·721	·715	·707	·711	·711	·747	·757	·763	·759	·754	·749	·725	·703
22	·720	·699	·690	·686	·702	·705	·725	·732	·749	·744	·747	·734	·713	·692
23	·745	·717	·709	·697	·704	·708	·737	·755	·783	·785	·790	·777	·754	·728
24	·777	·771	·761	·749	·751	·753	·781	·795	·818	·821	·821	·813	·784	·756
25	·769	·758	·747	·721	·725	·731	·754	·761	·799	·799	·815	·810	·797	·779
26	·756	·739	·736	·728	·740	·743	·766	·778	·798	·798	·799	·782	·759	·744
27	·760	·738	·730	·726	·748	·750	·780	·791	·813	·811	·821	·804	·796	·774
28	·803	·788	·783	·769	·771	·770	·786	·799	·824	·826	·832	·816	·798	·776
29	·774	·750	·738	·727	·733	·734	·758	·768	·791	·790	·793	·778	·759	·737
30	·769	·753	·741	·731	·749	·761	·792	·804	·826	·821	·823	·811	·799	·776
31	·819	·798	·781	·768	·781	·785	·815	·832	·849	·853	·858	·836	·803	·766
Mean .	29·730	29·712	29·703	29·694	29·699	29·705	29·730	29·740	29·762	29·763	**29·767**	29·757	29·742	29·722
Variation.	+·003	—·015	—·024	—·033	—·028	—·022	+·003	+·013	+·035	+·036	**+·040**	+·030	+·015	—·005
Mean in milibars.	1006·80	1006·17	1005·80	1005·54	1005·70	1005·87	1006·80	1007·10	1007·87	1007·90	**1008·04**	1007·64	1007·17	1006·47
Variation in milibars.	+·10	—·51	—·81	—1·12	—·95	—·75	+·10	+·44	+1·19	+1·22	**+1·25**	+1·02	+·51	—·17

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32° F.)

Hours. (B. M. T.)										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Milibars	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·608	29·589	29·589	29·593	29·610	29·618	29·639	29·646	29·646	29·639	29·608	1002·67	10 35	29·653	3 55	29·548	1
·660	·643	·642	·648	·664	·675	·692	·699	·707	·690	·664	04·54	22 15	·712	3 50	·610	2
·668	·654	·650	·649	·660	·668	·678	·677	·686	·673	·676	04·90	8 45	·726	3 40	·635	3
·636	·627	·630	·635	·644	·650	·665	·673	·682	·671	·654	04·14	10 10	·694	4 0	·619	4
·628	·620	·619	·621	·642	·650	·669	·673	·686	·673	·648	03·97	22 5	·689	16 50	·618	5
·680	·667	·664	·668	·683	·695	·712	·718	·731	·716	·682	05·17	22 30	·734	3 50	·631	6
·697	·673	·669	·673	·696	·702	·728	·735	·735	·727	·705	05·87	21 40	·740	17 0	·664	7
·655	·641	·635	·638	·660	·675	·689	·696	·696	·687	·683	05·20	9 55	·723	16 40	·632	8
·668	·657	·660	·658	·678	·684	·706	·707	·715	·712	·680	05·10	22 5	·718	3 40	·638	9
·700	·688	·689	·685	·701	·710	·730	·733	·736	·724	·714	06·24	9 35	·754	4 0	·675	10
·709	·693	·698	·698	·710	·716	·731	·737	·749	·735	·719	06·40	8 15	·756	4 10	·686	11
·674	·660	·660	·662	·674	·685	·705	·703	·711	·702	·697	05·64	9 0	·740	16 53	·656	12
·652	·638	·632	·630	·647	·660	·684	·690	·695	·690	·673	04·80	8 35	·724	16 42	·626	13
·614	·604	·595	·594	·604	·610	·627	·630	·636	·624	·634	03·54	8 30	·680	17 10	·590	14
·559	·544	·541	·534	·553	·560	·572	·573	·575	·564	·574	01·44	8 55	·606	17 50	·530	15
·530	·515	**·511**	·514	·538	·550	·579	·580	·595	·588	**·544**	**00·44**	21 55	·600	16 40	**·506**	16
·606	·602	·588	·584	·608	·622	·652	·656	·664	·652	·611	02·73	22 0	·666	4 10	·552	17
·628	·613	·615	·614	·635	·642	·660	·667	·675	·669	·641	03·73	10 15	·688	3 55	·592	18
·643	·635	·639	·634	·667	·677	·693	·694	·709	·696	·655	04·17	21 45	·713	4 50	·611	19
·739	·731	·729	·737	·755	·756	·777	·793	·805	·808	·734	06·94	22 15	·810	4 35	·664	20
·817	·801	·794	·802	·806	·807	·829	·841	·854	·842	·816	09·70	22 9	·856	3 0	·772	21
·802	·786	·785	·781	·796	·797	·814	·810	·820	·808	**·818**	**09·77**	10 25	**·874**	16 15	·778	22
·708	·692	·686	·682	·693	·696	·717	·717	·722	·710	·732	06·87	0 10	·792	16 20	·679	23
·662	·648	·644	·646	·652	·654	·668	·665	·664	·652	·670	04·70	9 30	·706	16 40	·642	24
·676	·666	·660	·656	·676	·676	·691	·690	·697	·686	·671	04·73	9 35	·718	3 5	·614	25
·665	·650	·652	·651	·670	·673	·684	·692	·704	·689	·678	04·97	8 30	·713	16 15	·642	26
·663	·656	·653	·653	·680	·692	·716	·721	·736	·727	·677	04·94	21 55	·739	3 55	·631	27
·689	·677	·673	·670	·686	·698	·719	·726	·732	·724	·704	05·84	9 0	·743	16 20	·667	28
·634	·613	·607	·605	·617	·627	·653	·654	·663	·654	·657	04·24	9 20	·709	17 10	·603	29
·617	·609	·601	·597	·615	·625	·649	·651	·653	·643	·636	03·60	8 50	·677	17 0	·594	30
·607	·587	·586	·589	·609	·618	·638	·640	·649	·636	·625	03·17	8 55	·674	4 5	·583	31
29·661	29·648	29·645	29·645	29·662	29·670	29·689	29·693	29·701	29·691	29·674						Mean.
—·013	—·026	—·029	—·029	—·012	—·004	+·015	+·019	+0·27	+·017							Variation.
1004·43	1003·97	1003·87	1003·87	1004·47	1004·70	1005·40	1005·50	1005·73	1005·43		1004·84					Mean in millibars.
—·44	—·88	—·98	—·98	—·41	—·14	+·51	+·64	+·91	+·58							Variation in millibars

AUGUST.

29·603	29·587	29·591	29·594	29·619	29·629	29·651	29·652	29·656	29·641	29·612	1002·77	21 30	29·661	4 50	29·581	1
·577	·557	·553	·555	·568	·573	·581	·593	·603	·594	·603	02·50	8 55	·661	16 50	·547	2
·558	·536	**·533**	·536	·555	·557	·573	·581	·589	·579	**·572**	**01·37**	10 0	·625	16 10	**·527**	3
·558	·543	·549	·557	·578	·587	·603	·608	·614	·602	·574	01·44	21 50	·623	5 20	·527	4
·634	·617	·618	·620	·644	·649	·671	·672	·681	·664	·628	03·27	21 45	·684	3 20	·556	5
·636	·620	·616	·612	·624	·632	·652	·658	·669	·668	·651	04·03	8 40	·694	16 26	·608	6
·651	·637	·628	·631	·657	·663	·674	·682	·688	·677	·657	04·24	21 30	·691	4 45	·619	7
·656	·648	·651	·647	·668	·681	·699	·704	·711	·707	·670	04·70	21 50	·713	4 15	·631	8
·692	·677	·681	·687	·701	·708	·723	·737	·749	·732	·701	05·73	21 45	·753	4 20	·651	9
·648	·630	·622	·617	·634	·640	·660	·668	·675	·660	·669	04·70	0 4	·718	17 20	·616	10
·676	·676	·684	·690	·717	·732	·762	·770	·778	·778	·689	05·40	22 10	·786	4 20	·606	11
·812	·813	·813	·815	·831	·834	·866	·877	·889	·877	·822	09·87	22 15	·893	4 5	·751	12
·850	·834	·828	·830	·840	·850	·864	·858	·855	·840	**·860**	**11·20**	8 45	**·912**	12 55	·818	13
·781	·771	·770	·768	·776	·785	·800	·804	·812	·796	·803	09·20	8 50	·842	16 40	·764	14
·774	·768	·756	·760	·775	·780	·799	·799	·796	·784	·782	08·47	9 30	·822	3 50	·746	15
·758	·742	·750	·753	·768	·782	·798	·802	·802	·793	·771	08·13	9 20	·820	3 45	·720	16
·783	·767	·767	·771	·789	·801	·823	·835	·839	·827	·795	08·97	22 0	·844	3 30	·751	17
·790	·773	·762	·759	·771	·775	·803	·815	·817	·803	·808	09·37	8 30	·863	15 15	·757	18
·748	·719	·710	·715	·742	·755	·772	·774	·769	·756	·769	08·10	9 5	·823	16 30	·701	19
·711	·685	·691	·697	·719	·737	·762	·759	·758	·749	·740	07·10	9 45	·787	16 15	·679	20
·687	·672	·671	·667	·689	·693	·715	·719	·741	·737	·719	06·40	8 35	·767	17 20	·665	21
·663	·651	·661	·667	·697	·705	·735	·747	·749	·747	·711	06·13	8 50	·753	16 20	·645	22
·719	·706	·710	·715	·740	·754	·784	·785	·784	·771	·744	07·24	9 5	·795	4 25	·693	23
·721	·699	·697	·705	·744	·747	·787	·785	·781	·781	·767	08·04	9 15	·829	16 20	·691	24
·773	·753	·745	·747	·759	·767	·781	·780	·781	·769	·767	08·04	10 15	·820	4 40	·717	25
·721	·701	·705	·702	·727	·735	·763	·768	·778	·766	·751	07·43	9 15	·806	16 26	·697	26
·765	·749	·753	·754	·778	·788	·804	·811	·820	·810	·778	08·37	10 38	·828	3 5	·724	27
·757	·738	·736	·733	·751	·764	·788	·789	·788	·778	·782	08·47	8 55	·836	16 52	·728	28
·715	·694	·696	·704	·729	·744	·768	·777	·786	·773	·751	07·43	9 0	·798	16 25	·690	29
·754	·740	·746	·749	·781	·798	·825	·835	·839	·824	·785	08·57	21 45	·841	2 55	·727	30
·747	·727	·745	·749	·767	·785	·819	·817	·819	·809	·797	09·04	9 45	·861	15 20	·725	31
29·707	**29·691**	29·692	29·694	29·714	29·724	29·745	29·750	29·755	29·745	29·727						Mean.
—·020	**—·036**	—·035	—·033	—·013	—·003	+·018	+·023	+·028	+·018							Variation.
1005·94	**1005·43**	1005·47	1005·54	1006·24	1006·54	1007·27	1007·40	1007·57	1007·27		1006·64					Mean in milibars
—·68	**—1·22**	—1·19	—1·12	—·44	—·10	+·61	+0·78	+·95	+·61							Variation in milibars

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours. (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·797	29·775	29·765	29·749	29·755	29·751	29·773	29·785	29·815	29·819	29·823	29·807	29·788	29·766
2	·768	·752	·751	·739	·749	·751	·783	·791	·807	·807	·811	·785	·767	·741
3	·772	·755	·749	·737	·750	·754	·773	·789	·806	·808	·804	·786	·774	·751
4	·757	·736	·714	·700	·714	·714	·719	·734	·759	·760	·764	·752	·730	·684
5	·713	·688	·682	·675	·686	·685	·705	·717	·635	·734	·731	·713	·673	·649
6	·692	·675	·654	·624	·642	·651	·675	·691	·714	·709	·713	·702	·678	·635
7	·673	·654	·646	·633	·645	·654	·654	·668	·693	·685	·690	·663	·634	·606
8	·652	·633	·618	·611	·612	·619	·633	·632	·655	·654	·658	·631	·606	·579
9	·614	·601	·586	·584	·584	·585	·612	·625	·640	·629	·636	·619	·586	·548
10	·554	·534	·520	·514	·526	·534	·544	·563	·578	·578	·578	·565	·545	·522
11	·622	·605	·601	·583	·596	·612	·642	·654	·678	·678	·689	·669	·655	·640
12	·670	·654	·655	·641	·639	·637	·656	·662	·690	·692	·694	·682	·663	·643
13	·692	·665	·654	·643	·662	·668	·694	·706	·729	·726	·732	·725	·701	·675
14	·706	·687	·671	·654	·667	·674	·699	·719	·746	·746	·745	·726	·692	·658
15	·674	·651	·652	·642	·656	·665	·689	·709	·728	·726	·738	·720	·699	·683
16	·728	·714	·706	·700	·706	·707	·738	·751	·783	·779	·779	·763	·742	·707
17	·677	·655	·642	·629	·637	·636	·659	·677	·687	·691	·695	·683	·659	·630
18	·645	·625	·613	·600	·606	·612	·635	·647	·673	·679	·694	·681	·663	·636
19	·695	·678	·672	·658	·664	·670	·691	·704	·725	·726	·733	·725	·712	·699
20	·739	·718	·709	·706	·725	·736	·760	·773	·796	·798	·807	·789	·785	·758
21	·770	·747	·739	·726	·735	·741	·762	·779	·801	·805	·816	·798	·776	·760
22	·786	·769	·764	·748	·761	·766	·791	·808	·834	·835	·841	·820	·802	·781
23	·779	·772	·773	·766	·778	·791	·822	·838	·852	·845	·851	·834	·817	·801
24	·804	·786	·786	·780	·794	·806	·837	·851	·880	·879	·882	·866	·854	·831
25	·871	·858	·855	·845	·859	·871	·902	·920	·939	·938	·943	·923	·896	·879
26	·894	·880	·877	·868	·885	·894	·918	·930	·952	·948	·955	·932	·904	·875
27	·880	·861	·861	·857	·874	·886	·913	·918	·937	·932	·930	·899	·868	·841
28	·855	·835	·833	·821	·827	·836	·861	·872	·892	·884	·881	·854	·829	·797
29	·796	·777	·769	·762	·771	·782	·812	·820	·842	·842	·840	·816	·788	·760
30	·818	·810	·810	·812	·812	·831	·857	·843	·867	·866	·866	·837	·813	·782
Mean .	29·736	29·718	29·711	29·700	29·711	29·717	29·740	29·753	29·774	29·773	29·777	29·759	29·736	29·711
Variation.	+·006	—·012	—·019	—·030	—·019	—·013	+·010	+·023	+·044	+·043	+·047	+·029	+·006	—·019
Mean in milibar.	1007·00	1006·37	1006·13	1005·70	1006·13	1006·34	1007·10	1007·50	1008·24	1008·20	1008·34	1007·70	1007·00	1006·13
Variation in milibar.	+·20	—·41	—·64	—1·02	—·64	—·44	+·34	+·78	+1·49	+1·46	+1·59	+·98	+·20	—·6

OCTOBER.

1	29·826	29·794	29·784	29·787	29·806	29·822	29·843	29·862	29·889	29·833	29·891	29·866	29·834	29·800
2	·816	·798	·802	·798	·810	·801	·809	·826	·845	·838	·835	·807	·785	·746
3	·750	·729	·728	·711	·725	·734	·754	·763	·775	·766	·767	·741	·709	·686
4	·739	·714	·704	·706	·728	·746	·778	·790	·807	·798	·788	·762	·728	·700
5	·775	·763	·763	·761	·780	·789	·812	·832	·852	·850	·849	·820	·793	·758
6	·818	·808	·796	·782	·792	·797	·826	·835	·852	·845	·836	·817	·793	·757
7	·756	·741	·743	·732	·747	·758	·778	·784	·800	·794	·795	·767	·739	·705
8	·764	·738	·743	·733	·744	·753	·774	·785	·802	·792	·786	·757	·738	·710
9	·785	·761	·762	·756	·776	·781	·795	·792	·807	·797	·806	·798	·777	·744
10	·805	·787	·784	·775	·794	·801	·828	·836	·856	·858	·849	·820	·798	·764
11	·801	·782	·773	·765	·783	·795	·830	·851	·874	·871	·861	·829	·795	·764
12	·774	·767	·758	·761	·776	·785	·813	·833	·854	·845	·843	·818	·786	·753
13	·767	·755	·757	·752	·763	·766	·795	·809	·840	·841	·839	·809	·776	·736
14	·745	·726	·720	·713	·722	·735	·768	·776	·800	·804	·793	·759	·735	·699
15	·746	·722	·698	·679	·696	·718	·743	·761	·781	·769	·751	·719	·686	·661
16	·691	·673	·664	·662	·662	·667	·686	·699	·720	·717	·721	·695	·681	·648
17	·659	·641	·636	·645	·668	·679	·712	·726	·746	·740	·738	·699	·673	·653
18	·670	·652	·648	·635	·648	·661	·682	·694	·703	·710	·700	·675	·651	·613
19	·622	·590	·586	·578	·586	·586	·606	·612	·629	·636	·640	·627	·604	·574
20	·640	·618	·620	·612	·632	·650	·684	·700	·720	·721	·727	·702	·678	·646
21	·705	·691	·689	·686	·697	·713	·739	·750	·779	·792	·793	·773	·753	·729
22	·810	·792	·796	·792	·806	·816	·857	·879	·900	·897	·898	·880	·865	·843
23	·894	·875	·871	·868	·884	·897	·931	·943	·965	·964	·959	·930	·912	·890
24	·935	·917	·915	·914	·930	·949	·966	·975	·995	·989	·986	·953	·927	·900
25	·925	·916	·901	·896	·909	·923	·950	·962	·980	·974	·968	·930	·909	·883
26	·867	·849	·840	·833	·852	·859	·891	·904	·926	·917	·909	·888	·860	·832
27	·896	·876	·876	·877	·891	·903	·936	·954	·978	·980	·977	·949	·927	·905
28	·947	·927	·923	·921	·934	·942	·978	·989	30·014	30·009	30·004	·975	·951	·926
29	·932	·917	·910	·903	·915	·931	·966	·986	·017	·017	·002	·969	·933	·909
30	·889	·864	·862	·855	·867	·877	·907	·916	29·940	29·942	29·936	·902	·876	·841
31	·865	·849	·843	·839	·852	·862	·887	·905	·929	·930	·930	·905	·885	·856
Mean .	29·794	29·775	29·771	29·765	29·780	29·790	29·817	29·830	29·851	29·848	29·844	29·817	29·792	29·762
Variation.	·000	—·019	—·023	—·029	—·014	—·004	+·023	+·036	+·057	+·054	+·050	+·023	—·002	—·032
Mean in milibars.	1008·94	1008·27	1008·13	1007·97	1008·40	1008·80	1009·74	1010·10	1010·83	1010·77	1010·64	1009·74	1008·87	1007·87
Variation in milibars.	·00	—·64	—·78	—·98	—·47	—·14	+·78	+1·22	+1·93	+1·83	+1·69	+·78	—·07	—1·08

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours. (B. M. T.)										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Mean.	Mean in Milibar.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·745	29·722	29·719	29·717	29·740	29·751	29·777	29·779	29·790	29·781	29·770	1008·10	9 5	29·825	16 6	29·713	1
·733	·721	·717	·721	·744	·765	·788	·792	·793	·782	·765	07·97	9 15	·827	16 25	·712	2
·713	·693	·691	·688	·717	·720	·752	·762	·777	·762	·753	07·50	9 6	·818	17 5	·684	3
·668	·650	·664	·665	·704	·708	·731	·726	·720	·713	·716	06·30	9 40	·766	15 32	·646	4
·630	·622	·640	·646	·675	·684	·705	·713	·732	·712	·689	05·40	9 27	·739	15 10	·615	5
·611	·601	·619	·629	·649	·662	·677	·689	·700	·680	·666	04·60	8 30	·717	15 1	·589	6
·595	·589	·596	·605	·630	·646	·662	·663	·662	·647	·646	03·90	8 12	·696	15 2	·574	7
·564	·546	·574	·587	·600	·613	·630	·635	·642	·625	·617	02·94	9 50	·660	15 53	·544	8
·533	·521	·533	·541	·556	·567	·582	·577	·566	·554	·582	01·77	8 25	·644	15 20	·516	9
·510	**·508**	·516	·538	·574	·579	·609	·623	·628	·616	**·557**	**00·94**	21 15	·634	14 47	**·502**	10
·631	·619	·621	·621	·645	·655	·677	·677	·683	·673	·643	03·80	9 55	·691	4 2	·579	11
·634	·623	·623	·629	·658	·668	·692	·693	·705	·696	·662	04·47	21 55	·707	16 20	·617	12
·659	·646	·647	·650	·680	·696	·724	·726	·736	·719	·690	05·40	22 12	·740	3 8	·640	13
·645	·629	·637	·649	·667	·678	·696	·701	·712	·693	·687	05·34	9 26	·751	16 15	·623	14
·671	·664	·677	·682	·708	·708	·728	·740	·744	·730	·695	05·57	21 55	·748	3 30	·638	15
·687	·663	·664	·661	·683	·697	·719	·714	·712	·690	·716	06·30	8 50	·786	15 54	·658	16
·608	·589	·589	·590	·622	·640	·670	·672	·672	·654	·648	03·97	9 37	·702	15 41	·584	17
·623	·614	·617	·624	·652	·669	·700	·703	·708	·694	·651	04·03	21 20	·712	3 52	·594	18
·687	·677	·691	·695	·722	·736	·757	·755	·757	·745	·707	05·94	20 55	·763	3 50	·653	19
·744	·731	·730	·732	·752	·757	·780	·780	·786	·777	·757	07·64	10 10	·811	2 15	·703	20
·748	·730	·730	·736	·756	·770	·792	·800	·803	·792	·767	08·94	10 15	·818	4 5	·722	21
·776	·764	·758	·764	·782	·790	·811	·810	·806	·795	·790	08·80	9 30	·844	3 22	·744	22
·786	·768	·776	·778	·792	·794	·820	·822	·818	·806	·803	09·20	9 25	·856	3 7	·762	23
·824	·807	·820	·824	·850	·858	·876	·878	·880	·866	·838	10·37	9 8	·886	2 40	·776	24
·860	·842	·858	·862	·888	·898	·917	·919	·919	·902	·890	12·20	9 10	·948	15 25	·838	25
·864	·849	·859	·862	·878	·884	·907	·905	·903	·890	**·896**	**12·40**	9 26	**·958**	15 5	·846	26
·827	·814	·822	·822	·842	·852	·878	·876	·876	·860	·872	11·57	8 36	·944	15 15	·810	27
·779	·762	·762	·766	·797	·805	·824	·831	·829	·811	·827	10·04	8 15	·898	16 5	·758	28
·731	·708	·730	·737	·766	·800	·828	·831	·825	·813	·789	08·70	9 5	·847	15 25	·703	29
·764	·744	·751	·758	·805	·835	·861	·854	·850	·838	·820	09·80	9 20	·875	15 55	·742	30
29·695	**29·681**	29·688	29·693	29·718	29·730	29·752	29·755	29·758	29·744	29·730						Mean.
—·035	**—·049**	—·042	—·037	—·012	·000	+·022	+·025	+·028	+·014							Variation.
1005·57	**1005·13**	1005·37	1005·50	1006·37	1006·80	1007·47	1007·57	1007·67	1007·24		1006·80					Mean in milibars.
—1·19	**— 1·66**	—1·42	—1·25	—·41	·00	+·75	+·85	+·95	+·47							Variationin milibars.

OCTOBER.

29·777	29·780	29·797	29·782	29·811	29·820	29·836	29·831	29·838	29·824	29·824	1009·96	9 25	29·896	15 0	29·758	1
·719	·711	·737	·758	·772	·775	·791	·781	·784	·768	·788	08·67	8 53	·850	15 5	·704	2
·665	·656	·673	·695	·711	·735	·759	·752	·766	·752	·729	06·70	8 10	·779	15 5	·649	3
·692	·678	·687	·700	·736	·756	·779	·782	·784	·774	·744	07·24	8 48	·810	16 30	·676	4
·735	·735	·757	·800	·814	·831	828	·832	·837	·819	·799	09·10	9 7	·858	14 45	·722	5
·725	·710	·744	·815	·798	·792	·802	·794	·793	·767	·795	08·97	8 11	·854	15 52	·704	6
·684	·664	·676	·699	·736	·759	·781	·776	·784	·771	·749	07·40	8 45	·804	15 55	·654	7
·694	·674	·685	·701	·742	·756	·783	·785	·809	·802	·752	07·47	22 52	·817	15 57	·673	8
·717	·701	·727	·741	·767	·790	·817	·812	·811	·807	·776	08·30	20 35	·821	14 40	·705	9
·746	·731	·742	·782	·795	·798	·814	·814	·814	·804	·800	09·10	9 10	·864	15 40	·728	10
·745	·736	·742	·737	·763	·783	·803	·798	·798	·785	·794	08·94	8 45	·877	15 30	·727	11
·729	·711	·711	·717	·744	·753	·762	·766	·782	·766	·775	08·27	9 20	·857	16 12	·705	12
·720	·700	·710	·715	·740	·746	·765	·761	·766	·744	·765	07·97	9 25	·850	15 35	·696	13
·688	·685	·689	·690	·722	·743	·765	·757	·773	·745	·740	07·10	9 34	·809	15 5	·673	14
·638	·620	·657	·660	·692	·689	·711	·711	·725	·705	·706	05·90	8 45	·785	15 5	·617	15
·632	·625	·617	·620	·641	·659	·680	·683	·677	·667	·670	04·70	10 8	·729	16 10	·611	16
·629	·611	·615	·624	·645	·657	·693	·691	·692	·680	·673	04·80	10 15	·751	16 35	·607	17
·594	·676	·579	·579	·607	·617	·642	·647	·647	.629	·648	03·97	9 35	·713	16 30	·571	18
·554	**·547**	·565	·580	·602	·614	·658	·652	·653	.640	**·606**	**02·60**	21 14	·658	14 43	**·542**	19
·631	·623	·620	·638	·669	·684	·714	·714	·716	·703	·669	04·70	9 46	·730	2 40	·610	20
·724	·713	·727	·739	·779	·792	·817	·814	·820	·809	·751	07·43	21 0	·823	2 30	·683	21
·836	·831	·845	·852	·876	·886	·911	·909	·914	·900	·858	11·07	21 50	·915	3 40	·789	22
·883	·876	·893	·899	·923	·934	·951	·947	·953	·936	·916	13·00	9 28	·969	2 20	·865	23
·892	·884	·899	·904	·925	·936	·950	·942	·943	·944	·936	13·70	8 40	.998	14 53	·880	24
·861	·839	·847	·844	·864	·879	·897	·891	·891	·877	·905	12·67	9 7	·983	15 50	·835	25
·828	·818	·825	·839	·863	·883	·909	·908	·912	·900	·871	11·53	8 50	·928	16 35	·816	26
·896	·889	·905	·906	·935	·944	·972	·971	·971	·954	·928	13·47	8 56	·984	2 41	·868	27
·913	·897	·915	·923	·950	·964	·975	·971	·964	·944	**·952**	**14·27**	9 5	30·018	15 13	·894	28
·888	·869	·885	·885	·908	·923	·942	·931	·929	·905	·932	13·57	9 15	**·020**	15 30	·866	29
·833	·821	·829	·832	·860	·880	·896	·893	·897	·881	·879	11·80	9 30	29·947	16 12	·819	30
·845	·834	·855	·870	·895	·910	·926	·916	·919	·905	·884	11·94	9 30	·936	15 5	·830	31
29·746	**29·737**	29.747	29·759	29·783	29·796	29·817	29·814	29·818	29·803	29·794						Mean.
—·048	**—·057**	—·047	—·035	—·011	+·002	+·023	+·020	+·024	+·009							Variation.
1007·30	**1007·04**	1007·34	1007·70	1008·50	1009·00	1009·74	1009·64	1009·77	1009·20		1008·94					Mean in milibars.
—1·63	**—1·93**	—1·59	—1·19	—·37	+·07	+·78	+·68	+·81	+·30							Variation in Milibars.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·895	29·876	29·875	29·861	29·874	29·883	29·914	29·921	29·945	29·943	29·936	29·909	29·888	29·858
2	·868	·850	·844	·845	·843	·849	·879	·894	·920	·921	·914	·881	·852	·826
3	·828	·809	·806	·793	·806	·811	·837	·848	·877	·879	·868	·837	·814	·781
4	·803	·790	·787	·778	·791	·806	·835	·845	·870	·870	·865	·832	·807	·786
5	·829	·817	·815	·812	·831	·841	·873	·890	·923	·922	·919	·890	·872	·840
6	·891	·872	·876	·872	·887	·894	·919	·934	·962	·960	·952	·926	·900	·884
7	·901	·886	·890	·885	·895	·900	·935	·949	·975	·971	·965	·937	·916	·683
8	·895	·883	·879	·872	·888	·896	·920	·932	·952	·942	·930	·897	·869	·844
9	·888	·865	·864	·854	·861	·872	·906	·918	·940	·935	·930	·896	·864	·835
10	·841	·819	·812	·806	·818	·828	·855	·881	·909	·903	·894	·862	·834	·809
11	·827	·802	·799	·784	·794	·800	·828	·843	·862	·863	·859	·830	·813	·791
12	·849	·830	·817	·813	·826	·844	·876	·889	·908	·902	·890	·860	·828	·808
13	·844	·826	·823	·813	·834	·845	·872	·891	·916	·909	·899	·870	·845	·815
14	·877	·867	·852	·847	·861	·864	·892	·916	·941	·957	·852	·917	·887	·855
15	·879	·866	·865	·857	·864	·873	·898	·909	·930	·922	·910	·881	·845	·815
16	·852	·828	·827	·821	·830	·844	·869	·888	·918	·919	·911	·876	·851	·830
17	·890	·870	·868	·859	·871	·876	·901	·917	·933	·925	·915	·889	·852	·822
18	·874	·850	·836	·818	·830	·845	·865	·877	·902	·905	·886	·858	·831	·802
19	·851	·839	·840	·831	·842	·845	·869	·886	·912	·919	·919	·895	·876	·866
20	·949	·930	·927	·924	·941	·953	·981	·989	**30·011**	30·011	30·004	·977	·948	·930
21	·948	·936	·931	·924	·941	·949	·973	·985	·005	·001	29·996	·963	·935	·907
22	·918	·906	·897	·888	·898	·902	·924	·938	29·964	29·963	·949	·922	·894	·873
23	·890	·867	·865	·861	·874	·874	·896	·904	·929	·925	·920	·895	·862	·831
24	·873	·859	·856	·849	·857	·860	·890	·903	·928	·932	·928	·909	·881	·861
25	·888	·866	·861	·857	·868	·874	·905	·917	·949	·943	·944	·916	·888	·852
26	·885	·877	·877	·871	·887	·889	·912	·925	·949	·939	·933	·904	·877	·863
27	·902	·883	·874	·866	·877	·882	·911	·920	·942	·945	·943	·912	·876	·848
28	·892	·879	·878	·879	·897	·914	·944	·961	·986	·983	·970	·939	·901	·883
29	·938	·923	·914	·907	·923	·933	·959	·972	·997	30·003	·999	·972	·940	·913
30	·948	·947	·936	·932	·943	·945	·975	·988	30·011	·005	·996	·962	·923	·892
Mean .	29·880	29·864	29·860	29·853	29·865	29·873	29·900	29·914	**29·939**	29·937	29·930	29·900	29·872	29·847
Variation.	—·000	—·016	—·020	—·027	—·025	—·007	+·020	+·034	+·059	+·057	+·050	+·020	—·008	—·033
Mean in milibars.	1011·80	1011·34	1011·20	1010·90	1011·37	1011·60	1012·50	1012·94	**1013·80**	1013·74	1013·50	1012·50	1011·57	1010·74
Variation in milibars.	·00	—·54	—·68	—·91	—·85	—·24	+·68	+·1·15	+2·00	+1·93	+1·69	+·68	—·27	—1·12

DECEMBER.

1	29·904	29·889	29·890	29·886	29·898	29·904	29·933	29·954	29·988	29·984	29·978	29·947	29·910	29·872
2	·902	·886	·883	·881	·892	·896	·923	·937	·976	·979	·976	·949	·919	·895
3	·898	·877	·869	·865	·877	·880	·907	·920	·950	·953	·949	·930	·899	·868
4	·906	·891	·887	·885	·889	·902	·922	·936	·959	·961	·956	·924	·899	·866
5	·895	·876	·875	·869	·880	·893	·926	·949	·974	·973	·969	·943	·916	·889
6	·925	·913	·907	·904	·915	·923	·952	·970	·996	·993	·986	·954	·925	·895
7	·908	·887	·887	·885	·898	·907	·942	·964	30·000	·999	·985	·957	·921	·889
8	·916	·896	·894	·892	·898	·906	·948	·959	29·977	·966	·969	·942	·906	·868
9	·883	·865	·855	·839	·855	·863	·888	·905	·939	·940	·935	·898	·859	·831
10	·878	·863	·861	·858	·872	·875	·905	·921	·944	·942	·934	·903	·873	·859
11	·902	·881	·878	·869	·881	·885	·910	·924	·946	·938	·930	·901	·865	·839
12	·890	·875	·869	·862	·872	·884	·908	·926	·954	·956	·942	·909	·878	·854
13	·867	·852	·846	·840	·852	·862	·889	9·08	·940	944	·941	·915	·889	·861
14	·888	·872	·868	·866	·883	·891	·915	·933	·962	960	·950	·924	·886	·852
15	·872	·855	·845	·835	·847	·857	·885	·903	·930	·928	·921	·888	·858	·832
16	·867	·846	·840	·828	·837	·841	·867	·888	·914	·913	·910	·888	·854	·835
17	·874	·854	·846	·838	·856	·864	·893	·906	·938	·939	·936	·912	·878	·844
18	·884	·872	·864	·860	·873	·883	·916	·936	·959	·960	·952	·923	·891	·875
19	·936	·915	·904	·891	·888	·887	·907	·925	·955	·955	·962	·944	·913	·879
20	·901	·881	·860	·857	·868	·889	·913	·936	·971	·981	·985	·971	·952	·951
21	·990	·977	·973	·964	·979	·989	30·013	30·033	**30·051**	30·040	30·034	30·004	·972	·941
22	·955	·944	·939	·927	·939	·941	29·973	29·993	·015	·010	·003	29·967	·937	·917
23	·951	·934	·909	·889	·888	·887	·915	·930	29·955	29·947	29·940	·907	·886	·853
24	·893	·873	·861	·854	·866	·871	·892	·908	·943	·947	·945	·914	·886	·855
25	·879	·862	·859	·848	·856	·866	·899	·921	·959	·961	·957	·929	·904	·872
26	·922	·911	·911	·900	·914	·926	·955	·977	30·009	30·013	·999	·970	·938	·906
27	·943	·924	·917	·905	·911	·919	·953	·967	29·999	·003	·999	·962	·929	·899
28	·924	·902	·906	·893	·898	·900	·924	·948	·976	29·980	·973	·939	·904	·872
29	·910	·892	·890	·876	·886	·891	·922	·937	·968	·965	·960	·932	·905	·879
30	·915	·897	·882	·870	·886	·889	·918	·940	·969	·969	·967	·931	·897	·879
31	·918	·897	·890	·870	·888	·889	·915	·929	·961	·966	·964	·937	·909	·874
Mean .	29·906	29·889	29·883	29·874	29·885	29·892	29·920	29·938	**29·967**	29·967	29·962	29·933	29·902	29·874
Variation.	+·001	—·016	—·022	—·031	—·020	—·013	+·015	+·033	+·062	+·062	+·057	+·028	—·003	—·031
Mean in milibars.	1012·70	1012·10	1011·80	1011·64	1011·97	1012·27	1013·20	1013·77	**1014·74**	1014·74	1014·57	1013·60	1012·57	1011·64
Variation in milibars.	+·03	—0·54	—0·75	—1·05	—0·68	—·44	+·51	+1·12	+2·10	+2·10	+1·93	+·95	—0·10	—1·05

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours (B. M. T.)										Mean.	Mean Millibars.	Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·847	29·833	29·844	29·848	29·864	29·879	29·900	29·893	29·894	29·880	29·886	1012·00	9 5	29·950	15 55	29·830	1
·813	·800	·808	·804	·824	·839	·859	·853	·857	·837	·853	10·90	8 42	·926	15 30	·796	2
·773	·762	·771	·772	·794	·803	·817	·814	·818	·808	·814	09.64	9 35	·884	16 20	·758	3
·774	·762	·768	·768	·793	·809	·834	·831	·836	·827	**·811**	**09·53**	9 20	·875	15 25	·759	4
·827	·815	·825	·829	·854	·871	·889	·893	·902	·891	·861	11·23	9 15	·927	2 40	·809	5
·865	·857	·864	·870	·891	·900	·916	·914	·919	·905	·901	12·53	8 51	·968	16 11	·854	6
·876	·867	·876	·881	·902	·907	·918	·912	·913	·902	·910	12·80	8 55	·980	15 9	·862	7
.833	·828	·848	·852	·878	·888	·903	·905	·909	·892	·889	12·10	8 28	·956	14 50	·824	8
·826	·816	·830	·838	·864	·870	·885	·884	·875	·854	·874	11·64	9 10	·944	15 7	·814	9
·791	·780	·786	·794	·820	·835	·858	·856	·858	·839	·837	10·34	8 55	·912	16 5	·778	10
·782	·771	·784	·791	·818	·838	·872	·867	·864	·854	·822	09·87	20 48	·876	15 27	·768	11
·802	·800	·807	·814	·844	·856	·871	·873	·868	·855	·847	10·74	8 48	·911	15 37	·797	12
·810	·801	·809	·817	·860	·879	·886	·883	·884	·870	·854	10·94	8 55	.921	15 5	·797	13
·831	·824	·830	·840	·867	·879	·891	·889	·892	·878	·879	11·80	9 35	·961	15 20	·821	14
·801	·785	·796	·804	·834	·851	·875	·873	·877	·859	·861	11·23	8 55	·935	15 40	·783	15
·819	·813	·819	·829	·867	·890	·911	·917	·919	·899	·864	11·34	21 25	·924	14 50	·810	16
·819	·809	·813	·826	·855	·866	·880	·887	·883	·872	·871	11 53	8 52	·937	16 5	·801	17
·789	·786	·801	·809	·834	·846	·863	·867	·870	·856	·846	10·70	9 20	·909	15 20	·781	18
·865	·861	·883	·898	·929	·941	·962	·964	·968	·957	·892	12·27	20 52	·971	3 40	·829	19
·918	·912	·917	·917	·943	·953	·972	·971	·975	·960	**·955**	**14·37**	8 55	**30·015**	15 47	·909	20
·897	·886	·895	·892	·907	·917	·928	·933	·933	·921	·937	13·74	8 55	·011	15 40	·883	21
·855	·849	·853	·854	·874	·892	·904	·905	·913	·893	·901	12·53	9 8	29·969	15 45	·845	22
·821	·811	·823	·826	·856	·877	·896	·891	·894	·885	·874	11·64	9 0	·933	15 37	·807	23
·844	·834	·851	·857	·889	·899	·924	·917	·817	·896	·884	11·94	9 28	·939	15 37	·831	24
·844	·826	·843	·849	·883	·897	·913	·912	·908	·893	·887	12·04	8 42	·951	15 20	·823	25
·855	·847	·862	·866	·885	·897	·921	·911	·921	·909	·894	12·34	8 48	·953	15 20	·843	26
·834	·827	·840	·848	·874	·886	·910	·909	·906	·895	·888	12·07	9 40	·952	15 15	·824	27
·863	·855	·876	·891	·919	·928	·953	·950	·954	·942	·918	13·07	8 55	·990	14 48	·852	28
·903	·894	·904	·912	·938	·961	·974	·970	·970	·958	·945	14·07	9 42	30·010	15 52	·890	29
·870	·854	·859	·860	·880	·892	·914	·910	·913	·902	·927	15·44	8 47	·014	15 35	·850	30
29·835	**29·825**	29·836	29·842	29·868	29·882	29·900	29·898	29·900	29·886	29·880						Mean.
—·045	—·055	—·044	—·038	—·012	+·002	+·020	+·018	+·020	+·006							Variation.
1010·27	1009·97	1010·30	1010·57	1011·47	1011·87	1012·50	1012·47	1012·50	1012·00		1011·80					Mean in millibars.
—1·52	—1·86	—1·49	—1·29	—·41	+·07	+·68	+·61	+·68	+·20							Variation in millibars

DECEMBER.

29·857	29·843	29·854	29·862	29·894	29·908	29·928	29·927	29·927	29·911	29·910	1012·80	9 0	29·992	15 55	29·840	1
·875	·865	·876	·887	·913	·926	·934	·928	·927	·911	·914	12·94	9 30	·982	15 25	·862	2
·860	·848	·858	·863	·886	·900	·919	·918	·920	·911	·897	12·44	9 28	·956	15 40	·844	3
·852	·836	·842	·847	·877	·887	·907	·906	·905	·896	·897	12·44	9 40	·963	15 45	·833	4
·883	·874	·883	·888	·907	·919	·936	·936	·932	·925	·913	12·90	8 48	·983	2 48	·865	5
·877	·866	·873	·885	·910	·917	·929	·928	·928	·913	·924	13·34	9 5	30·001	15 55	·863	6
·876	·862	·877	·882	·910	·928	·943	·937	·927	·918	·920	13·20	8 57	·005	15 5	·861	7
·856	·842	·858	·864	·885	·891	·904	·900	·902	·885	·905	12·67	8 40	29·980	15 45	·840	8
·826	**·810**	·823	·823	·849	·867	·891	·888	·889	·879	·871	11·53	9 5	·947	15 10	·807	9
·845	·833	·846	·855	·883	·895	·913	·913	·914	·904	·887	12·04	9 14	·947	15 55	·829	10
·829	·820	·828	·831	·862	·882	·905	·905	·908	·894	·884	11·94	8 52	·951	15 47	·817	11
·837	·822	·826	·826	·856	·872	·903	·899	·900	·882	·883	11·90	9 25	·962	15 57	·818	12
·849	·836	·843	·855	·883	·899	·914	·912	·914	·897	·884	11·94	9 34	·948	15 55	·832	13
·830	·821	·829	·837	·866	·880	·898	·896	·898	·882	·887	12·04	9 12	·966	15 40	·818	14
·820	.813	·822	·831	·856	·873	·893	·889	·890	·878	·868	11·47	8 36	·936	15 35	·810	15
·818	·811	·819	·824	·846	·864	·884	·888	·887	·877	**·860**	**11·20**	9 10	·918	15 52	**·806**	16
·822	·811	·828	·836	·863	·874	·894	·895	·897	·886	·874	11·64	9 17	·942	15 10	·808	17
·848	·835	·853	·861	·889	·906	·935	·941	·949	·937	·900	12·50	9 7	·964	15 40	·833	18
·866	·855	·868	·874	·896	·906	·928	·919	·916	·902	·908	12·77	8 50	·967	16 5	·851	19
·948	·935	·953	·958	·984	·993	30·011	30·005	30·007	·992	·946	14·10	21 8	30·015	2 8	·853	20
·930	·921	·925	·937	·955	·968	29·989	29·984	29·980	·966	**·980**	**15·20**	8 40	**·055**	15 55	·919	21
·892	·892	·903	**·916**	·931	·945	·973	·969	·967	·952	·950	14·20	9 10	·019	15 18	·889	22
·844	·833	·848	·849	·878	·895	·912	·910	·914	**·896**	·899	12·50	8 48	29·961	15 8	·831	23
·841	·828	·838	·839	·859	·872	·891	·892	·889	·877	·881	11·83	9 37	·951	16 5	·825	24
·856	·845	·855	·863	·894	·913	·944	·945	·943	·925	·898	12·47	9 8	·965	15 10	.843	25
·889	·872	·888	·899	·928	·940	·963	·964	·966	·952	·938	13·77	9 18	30·017	15 30	·870	26
·887	·872	·885	·891	·915	·931	·959	·957	·949	·931	·934	13·64	9 5	·007	15 40	·869	27
·855	·837	·850	·852	·875	·892	·917	·917	·921	·909	·907	12·74	9 35	29·982	15 55	·834	28
·868	·857	·872	·874	·905	·922	·945	·942	·942	·925	·911	12·83	9 16	·972	15 35	·854	29
·858	·848	·861	·867	·894	·911	·931	·936	·936	·920	·907	12·74	9 15	·975	15 37	·845	30
·863	·851	·865	·873	·907	·919	·947	·949	·952	·937	·911	12·83	9 35	·971	15 10	·849	31
29·860	**29·848**	29·860	29·866	29·892	29·906	29·927	29·926	29·926	29·912	29·905						Mean.
—·045	—·057	—·045	—·039	—·013	—·001	+·022	+·021	+·021	+·007							Variation.
1011·20	1010·77	1011·20	1011·40	1012·27	1012·70	1013.44	1013·40	1013·40	1012·87		1012·67					Mean in millibars.
—1·52	—1·93	—1·52	—1·32	—·44	+·03	+·75	+·71	+·71	+·24							Variation in millibars

RAINFALL (IN INCHES), 1933.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

(FROM PLUVIOGRAPH RECORDS).

MAY.

Date.	Hours (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	0·12	0·05	0·01	0·02	..	0·01	0·01	0·03	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	0·07	..	..	..
18	..	..	0·02	0·19	0·34	0·05	0·03	0·07	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	0·03	0·02	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .	0·12	0·08	0·05	0·21	0·34	0·06	0·04	0·10	..	..	0·07	..	..	..

JUNE

1	0·01	0·16	0·06	..	..	..	..	0·01	..	..	..	..	0·07	0·05
2	..	..	..	..	..	..	..	..	..	..	..	0·01	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	0·01	..	..	..	..	..	..	..	.	..
5	..	0·02	..	..	..	..	..	..	..	..	..	..	..	..
6	0·05	0·01	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	0·03	0·22	0·10	..	0·01	0·03	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	0·39	0·04	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	0·02	0·01	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	0·02	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	0·03	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	0·01	..	..	..	..	0·01	0·01
21	..	0·08	0·08	0·06	0·03	..	..	..	..	..	..	..	..	0·04
22	..	..	0·01	..	..	0·18	..	0·13	0·06	..	..	0·06	0·02	0·19
23	0·02	..	..	..	..	..	..	0·02	..	..	..	..	..	0·05
24	0·01	..	0·05	0·06	..	..	0·03	..	..	0·01	..	0·02	0·14	0·07
25	..	..	..	..	..	..	0·28	..	..	..	..	..	..	0·04
26	0·06	0·01	..	..	..	..	..	..	..	..	0·02	..	..	..
27	0·16	..	..	0·01	0·02	0·05	0·02	0·14	0·09	..	..	..	0·03	..
28	0·25	..	..	..	..	..	..	..	..	..	0·02	..	..	..
29	..	..	..	..	..	..	0·02	..	..	..	..	..	..	..
30	0·03	0·23	..	..	..	..	..	..	..	..	..	..	..	..
Total .	0·98	0·57	0·23	0·35	0·19	0·23	0·38	0·35	0·15	0·01	0·04	0·09	0·27	0·45

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

(FROM PLUVIOGRAPH RECORDS.)

MAY.

Hours (B. M. T.)										Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman.	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			H. to H.		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
..	..	..	..	..	..	..	..	..	0·14	0·14	0·14	23 24	0·15	14
..	..	..	..	..	..	..	..	..	..	0·25	0.12	0 1	0·26	15
..	..	0·17	0·37	0·34	..	..	..	..	0·01	**0·89**	**0.37**	17 18	**0·97**	16
0·01	0·01	..	..	..	..	..	..	0·21	0·02	0·32	0·21	22 23	0·38	17
..	0·03	..	..	..	..	..	0·01	..	..	0·74	0·34	4 5	0·77	18
..	..	..	..	..	..	..	..	..	0·21	0·21	0·21	23 24	0·22	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	..	..	..	..	21
..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
..	..	..	..	..	..	..	..	..	0·02	0·02	0·02	23 24	0·02	28
..	..	..	..	..	..	..	..	..	..	0·05	0·03	1 2	0·05	29
..	..	..	..	..	..	..	0·03	..	..	0·03	0·03	21 22	0.03	30
..	..	..	0·08	0·02	0·08	0·02	0·07	0·04	0·06	0·37	0·08	17 18	0.38	31
0·01	0·04	0·17	0·45	0·36	0·08	0·02	0·11	0·25	**0·46**	3·02	..	..	3·23	Total.

JUNE

..	0·04	..	..	..	..	..	..	..	..	0·40	0·16	1 2	0·44	1
..	..	..	..	..	..	..	..	..	0·01	0·02	0·01	11 12	0·02	2
..	..	..	..	..	..	..	..	..	0·10	0·10	0·10	23 24	0·10	3
..	..	..	..	..	..	..	..	..	..	0·01	0·01	4 5	0·01	4
..	..	..	..	..	..	..	..	0·03	..	0·05	0·03	22 23	0·05	5
..	..	..	..	..	..	..	..	..	..	0·06	0·05	0 1	0·08	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
..	..	..	..	..	..	..	..	..	..	0·39	0·22	3 4	0·40	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
..	..	..	..	..	..	..	..	..	..	0·43	0·39	0 1	0·43	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
..	..	..	..	..	..	..	..	..	..	..	..	..	..	14
..	..	..	..	..	..	..	..	..	..	0·03	0·02	6 7	0·03	15
..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
..	..	..	..	..	..	..	0·01	..	..	0·03	0·02	1 2	0·03	17
..	..	0·01	..	..	..	..	0·03	..	..	0·04	0·03	21 22	0·07	18
..	..	..	..	..	..	..	..	..	..	0·03	0·03	4 5	0·03	19
..	..	..	..	..	..	0·01	0·01	0·01	0·02	0·08	0·02	23 24	0·09	20
0·09	0·12	0·17	0·13	0·07	0·03	0·04	0·16	0·06	0·11	1·27	0·17	16 17	1·35	21
0·01	..	..	0·11	0·01	0·04	0·10	0·10	0·04	0·02	1·08	0·19	13 14	1·14	22
..	..	0·43	..	0·10	0·02	0·10	0·18	0·12	0·09	1·13	0·43	16 17	1·21	23
0·69	0·04	..	..	0·01	..	..	..	..	..	1·13	**0·69**	14 15	1·22	24
..	..	..	0·03	..	0.43	0·03	0·04	..	0·05	0·90	0·43	19 20	0·97	25
..	..	..	..	..	..	0·22	0·01	0·02	..	0·34	0·22	20 21	0·34	26
..	..	..	..	..	0·02	0·03	0·03	0·11	0·10	0·81	0·16	0 1	0·87	27
..	..	0·38	..	..	..	..	..	..	..	0·65	0·38	16 17	0.70	28
..	..	..	..	0·03	..	..	..	..	..	0·05	0·03	18 19	0·05	29
..	..	..	..	..	..	..	..	..	..	0.26	0·23	1 2	0·28	30
0·79	0·20	**0·99**	0.27	0·22	0·54	0·53	0·57	0·39	0·50	9.29	..	..	9·91	Total.

* Adopted as the standard instrument in the Observatory since 1845.

RAINFALL (IN INCHES), 1933.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours. (B. M. T.)													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	0·06	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	0·02	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	0·14	..	..	..	0·01	..	..	0·01	..	..	..
13	..	..	..	0·01	..	..	..	..	0·01	..	0·10	..	..	..
14	0·56	0·17	..	0·02	..	0·04	0·08	0·11	0·18	0·06	0·03	..	..	..
15	0·01	..	..	0·03	..	..	..	..	..	..	..	..	0·05	..
16	0·04	..	..	0·37	0·24	0·13	0·01	0·05	..	0·02	0·14	0·05	0·06	0·02
17	0·03	0·20	0·04	0·07	0·01	..	..	..	..	..	..	..	..	0·01
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	0·06	..	..	0·09	0·01	..	..	..	..	..	..
20	0·02	..	0·01	0·03	0·01	0·20	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	0·01	..	..	..	..	..	..	..	..	..	..
23	..	..	0·01	..	..	..	..	..	..	..	..	..	..	0·02
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	0·02	0·04	..	..	..	0·34	..	..	..	..
26	0·10	..	..	..	..	0·02	..	..	..	..	0·02	..	..	..
27	0·03	0·01	..	0·06	..	0·20	0·27	0·06	0·32	0·05	0·07	..	..	..
28	..	0·07	0·22	0·07	0·10	0·06	0·06	0·06	..	..	..	..	0·06	0·03
29	..	..	..	0·06	0·04	..	..	0·01	..	0·06	0·03	..	..	..
30	..	..	0·01	..	0·17	..	0·04	0·02	0·01	0·49	0·94	0·67	0·15	0·07
31	0·03	0·06	0·14	0·20	0·37	0·32	0·13	0·20	0·07	0·13	0·34	0·09	0·06	0·20
Total .	0·82	0·57	0·43	1·13	0·96	1·01	0·68	0·55	0·59	1·15	1·68	0·81	0·38	0·35

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1	0·42	1·12	0·56	0·91	0·71	0·27	0·27	0·66	0·03	0·01	0·01	..	0·20	0·03
2	0·09	0·12	0·15	0·08	0·02	0·03	..	0·07	0·08	0·30	0·26	0·14	0·06	0·23
3	..	..	..	..	0·16	..	..	..	..	..	..	..	0·02	..
4	..	..	..	0·02	0·03	..	0·14	0·38	0·25	0·13	0·32	0·18	0·59	0·40
5	0·17	0·07	0·16	0·23	0·13	0·08	0·28	0·12	0·14	0·48	0·05	..	0·03	0·08
6	..	..	..	0·02	0·01	..	..	0·01	..	..	..	0·01	..	..
7	..	..	..	..	0·01	..	..	..	..	..	..	..	..	0·01
8	..	0·03	0·05	..	..	..	..	0·03	..	..	..	..	0·05	..
9	..	..	0·01	..	..	0·06	..	0·06	..	0·08	..	0·02	0·10	..
10	..	..	0 01	..	..	..	..	..	..	..	..	..	..	..
11	0·06	..	0·02	..	..	0·05	0·01	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	0·05	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	0·13	..	..	..	..	..	..	..	..	0·01	..	..
16	..	..	..	..	..	..	..	..	..	..	..	0·11	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	0·01	..
18	..	..	..	..	0·02	..	..	..	..	..	..	..	..	..
19	..	..	0·01	0·03	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	0·01	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	0·17	0·05	..	..	..	..	..	0·23	0·30	..	0·01	0·08
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	0·01	..	..	..	..	..	..	..
31	..	..	..	..	..	0·02	..	..	..	..	..	..	..	..
Total ..	0·74	1·34	1·27	1·34	1·09	0·51	0·71	0·73	0·51	1·23	1·05	0·42	1·06	0·83

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (FROM PLUVIOGRAPH RECORDS

Hours. (B. M. T.)										Daily Total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman.	Date.
14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24			H. to H.		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	.	0·01	0·07	0·06	1 2	0·08	4
..	..	0·02	..	..	..	..	..	..	..	0·02	0·02	16 17	0·02	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
..	0·13	..	..	..	..	..	..	..	..	0·13	0·13	15 16	0·13	8
..	..	..	..	..	..	..	..	..	..	0·02	0·02	7 8	0·02	9
..	..	..	..	..	0·01	..	..	0·01	..	0·02	0·01	19 20	0·02	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	0·16	0·14	3 4	0·17	12
0·01	..	..	..	..	..	..	..	..	0·36	0·49	0·36	23 24	1·54	13
..	0·09	..	..	..	..	..	0·14	0·18	..	1·66	0·56	0 1	1·71	14
..	..	..	..	..	..	..	..	0·03	0·02	0·14	0·05	12 13	0·14	15
..	0·13	0·05	0·05	..	..	..	0·08	..	0·03	1·47	0·37	3 4	1·58	16
..	..	0·03	..	..	..	..	..	..	..	0·39	0·20	1 2	0·42	17
..	..	..	..	..	0·04	..	0·12	0·03	..	0·19	0·12	21 22	0·20	18
..	..	..	..	..	..	0·02	..	0·07	0·02	0·27	0·07	22 23	0·33	19
..	..	..	0·01	..	..	..	..	..	..	0·28	0·20	5 6	0·29	20
..	..	..	..	..	..	..	0·01	..	..	0·01	0·01	21 22	0·01	21
..	..	..	..	..	..	..	..	..	..	0·01	0·01	3 4	0·01	22
0·01	..	..	..	..	..	..	..	..	..	0·04	0·02	13 14	0·04	23
0·01	..	..	..	..	0·13	..	..	..	0·01	0·15	0·13	19 20	0·17	24
..	..	..	..	0·06	..	0·02	..	..	0·01	0·49	0·34	9 10	0·52	25
..	..	..	..	..	0·02	..	0·01	0·09	..	0·26	0·09	22 23	0·28	26
..	..	..	..	.	..	0·03	..	..	..	1·10	0·32	8 9	1·12	27
0·09	..	..	..	..	..	..	..	..	..	0·82	0·22	2 3	0·88	28
..	0·02	0·13	..	0·03	..	..	..	..	..	0·38	0·13	16 17	0·39	29
0·05	0·27	0·01	0·06	0 04	0·03	0·10	0·06	0·04	0·17	3·40	0·94	10 11	3·54	30
0·06	0·05	..	..	0·07	0·02	..	0·19	0·11	0·11	2·95	0·37	4 5	3·08	31
0·23	0·69	0·24	0·12	0·20	0·25	0.17	0·61	0·56	0·74	14·92	..	..	15·69	Total.

AUGUST.

0·07	0.18	0·04	0·08	..	0·04	0·03	0·02	..	0·03	5·09	1.12	1 2	5·28	1
0.30	0.08	..	..	0·02	..	0·03	0.03	0·02	..	2·11	0·30	9 10	2·26	2
0.02	0·08	0·11	0.07	0·18	0·01	..	..	..	..	0·65	0·18	18 19	0·73	3
0.22	0·04	0·05	0·02	..	0·12	0·02	0·16	0·04	0·21	3·32	0·59	12 13	3·45	4
..	0·04	..	..	..	0·08	0·02	0.02	..	0·01	2·19	0·48	9 10	2·24	5
..	..	..	..	..	0·02	..	..	..	..	0·07	0·02	3 4	0·08	6
..	0·02	..	..	0·05	..	..	..	..	..	0·09	0·05	18 19	0·10	7
..	0·0	..	..	..	..	..	..	..	..	0·18	0·05	2 3	0·18	8
..	..	..	0·01	..	..	..	..	..	..	0·34	0·10	12 13	0·36	9
..	..	..	..	..	..	..	0·04	..	..	0·05	0·04	21 22	0·05	10
..	..	..	..	..	..	..	0·01	..	..	0·15	0·06	0 1	0·15	11
..	0·07	..	..	0·01	..	0·08	..	..	..	0·16	0·08	20 21	0·17	12
..	..	..	..	..	..	..	..	..	0·01	0·06	0·05	11 12	0·06	13
..	0·05	..	..	..	..	..	..	0·03	..	0·08	0·05	15 16	0·08	14
..	..	..	..	..	..	..	..	..	..	0·14	0·13	2 3	0·15	15
..	..	..	..	..	..	..	..	..	..	0·11	0·11	11 12	0·11	16
..	..	..	..	..	..	..	..	..	..	0·01	0·01	12 13	0·01	17
..	..	..	..	..	..	..	..	..	..	0.02	0·02	4 5	0·02	18
..	..	..	..	..	..	..	..	..	..	0·04	0·03	3 4	0·05	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	0.01	0.01	8 9	0·01	21
..	..	..	..	..	..	..	..	..	0.03	0·03	0.03	23 24	0.03	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
0·51	0 04	..	..	..	0·05	0 12	0·01	..	..	1.57	0·51	14 15	1·62	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
..	..	0.01	..	..	..	..	..	..	..	0·01	0·01	16 17	0·01	27
..	..	..	..	..	..	..	..	..	..	..	..	..	..	28
..	..	..	0·02	..	..	..	..	..	..	0·02	0·02	17 18	0·02	29
..	..	..	..	..	..	..	..	..	..	0·01	0·01	6 7	0·01	30
..	..	..	..	..	..	..	..	..	..	0·02	0·02	5 6	0·02	31
1.12	0·62	0·21	0·20	0·26	0·32	0·30	0·29	0·09	0·29	16·53	..	..	17·25	Total.

* Adopted as the standard instrument in the Observatory since 1845.

RAINFALL (IN INCHES), 1933.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

(FROM PLUVIOGRAPH RECORDS.)

Date.	Hours (B. M. T.).													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	0·01	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	0·01	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	0·01	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
10	1·74	0·27	0·05	..	..	..	0·12	..	..	..	..	..	..	..
11	..	..	..	..	..	0·02	..	..	..	0·01	0·02	0·01	..	0·01
12	..	0·01	0·12	0·04	0·02	..	..	0·01	0·02	..	..	..	..	..
13	0·06	..	..	..	..	..	..	..	..	..	..	0·02	..	..
14	..	..	..	..	..	..	..	..	..	..	..	0·02	..	..
15	..	0·20	0·11	..	..	..	..	..	0·07	0·15	..	..	0·25	..
16	..	0·32	0·03	..	0·07	..	0·17	0·01	..	..	0·03	0·02	..	..
17	0·01	..	..	..	0·19	0·21	0·08	0·01	..	0·03	..	..	..	..
18	0·04	..	..	0·05	..	..	..	0·10	0·02	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
22	..	..	..	..	0·02	..	0·01	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	0·11	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	0·21	0·08	..	..	..	..	..	..	..	..	..	..	..
Total .	1.86	1·01	0·39	0·10	0·30	0·34	0·39	0·13	0·11	0·19	0·05	0·07	0·25	0·03

†OCTOBER.

1	..	..	..	..	..	..	0·02	..	..	..	..	..	..	..
2	..	..	..	0·03	0·10	0·09	..	..	..	..	..	..	..	..
4	..	..	..	..	0·14	0·01	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	0·10	0·03	0·37	..	..	..	..
Total .	..	..	..	0·03	0·24	0·10	0·02	0·10	0·03	0·37	..	..	..	..

† DECEMBER.

19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	0·12	..	0·01	..	0·03	..	..	..	..	..	..	..	..	..
21	0 02	0·02	..	..	0·46	0·03	..	..	..	0·11	..	..	..	..
Total .	0·14	0·02	0·01	..	0·49	0·03	..	..	..	0·11	..	..	..	..

† Only those dates on which rainfall occurred have been entered in these tables.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

(FROM PLUVIOGRAPH RECORDS.

Hours (B. T. M.)										Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman.	Date.
14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24			H. to H.		
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	0·04	..	..	..	..	..	0·05	0·04	18 19	0·05	4
0·01	0·17	0·05	0·01	0·14	0·16	0·16	0·04	0·04	0·01	0·80	0·17	15 16	0·82	5
..	..	0·01	0.54	0·03	..	0·01	0·03	0·02	0·02	0·66	0·54	17 18	0·67	6
..	0.69	0·17	0·06	..	0·04	0·07	0 91	..	..	1·05	0·69	15 16	1·09	7
..	..	0·03	0·09	0·05	0·02	0·07	0.81	0·11	..	1·18	0·81	21 22	1·23	8
0·03	0·05	0·05	0.11	0·01	..	..	..	0·09	0·86	1.21	0·86	23 24	1·21	9
..	..	..	..	..	..	..	..	..	0·01	**2·19**	**1.74**	0 1	**2·32**	10
0·02	0·05	..	0·06	..	..	..	..	0.08	0.03	0·31	0·08	22 23	0·32	11
0·19	..	..	0·03	..	0·01	..	..	..	0·17	0·62	0·19	14 15	0·64	12
..	..	..	..	..	..	..	..	..	..	0·08	0·06	0 1	0·10	13
..	..	..	..	..	..	..	..	..	0·18	0·20	0·18	23 24	0·20	14
0·01	..	..	..	..	0·05	..	..	0·03	0·19	1·06	0·25	12 13	1·07	15
..	..	..	..	..	..	..	0·03	..	0·04	0·72	0·32	1 2	0·76	16
0·33	0·02	0·08	0.01	..	..	..	0·03	..	0.06	1·06	0·33	14 15	1·13	17
..	..	..	..	..	..	..	..	..	..	0·21	0·10	7 8	0·21	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	.	..	..	..	..	..	..	0·01	0·01	13 14	0·01	21
..	..	..	..	..	..	..	..	..	..	0.03	0·02	4 5	0·03	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	0·01	..	0·01	0·01	22 23	0·01	24
..	..	..	..	..	..	..	..	..	..	0·11	0·11	5 6	0·12	25
..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
..	..	..	..	..	..	..	..	..	..	..	..	..	..	28
..	..	..	..	..	..	..	..	..	..	..	..	..	..	29
..	..	..	..	..	0·10	..	0·01	..	..	0·40	0·21	1 2	0·43	30
0·59	0·98	0·39	0·91	0·37	0·28	0·32	0·95	0·38	1·57	11·96	..	..	12·42	

†OCTOBER.

..	..	..	..	..	..	..	..	..	..	0·02	0·02	6 7	0·02	1
..	..	..	..	..	..	..	..	..	..	0·22	0·10	4 5	0·25	2
..	..	..	..	..	..	..	..	..	..	0·15	0·14	4 5	0·15	4
..	..	..	1·52	0·02	0·07	0·01	..	..	..	**1·62**	**1·52**	17 18	**1·68**	5
..	..	..	0·27	..	..	..	..	..	..	0·27	0·27	17 18	0·27	10
..	..	0·05	..	..	..	..	..	..	..	0·05	0·05	16 17	0·05	15
..	..	..	..	..	..	..	..	..	..	0·50	0·37	9 10	0·49	20
..	..	0·05	**1·79**	0·02	0·07	0·01	..	..	..	2·85	..	..	2·93	Total.

† DECEMBER.

..	..	..	..	..	..	..	..	..	0·02	0·02	0·02	23 24	0·03	19
..	..	..	..	..	..	..	..	..	0·05	0·21	0·12	0 1	0·21	20
..	..	..	..	..	..	..	..	..	..	**0·64**	**0·46**	4 5	**0·69**	21
..	..	..	..	..	..	..	..	..	0·07	0·87	..	..	0·93	Total.

† Only those dates on which rainfall occurred have been entered in these tables.

* Adopted as the standard instrument in the Observatory since 1845.

NOTE.—There was a fall of 0·01″ of rain between 19h and 20h on the 19th November. The months of January, February, March and April were dry.

The fall of rain in the year was 59·45″ by Pluviograph and 62·37″ by Newman; the difference is due to the difference in heights of the receiving funnels.

The number of rainy days in the year was 72 according to Pluviograph and 74 according to Newman, assuming a rainy day to be one on which a tenth of an inch of rain or upwards has fallen.

The greatest fall of rain during a day in the year, that of 1st August, was 5·09″ by Pluviograph and 5·28″ by Newman.

WIND VELOCITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.

JANUARY. (IN MILES PER HOUR.)

Date.	Hours (B. M. T.).														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	8	6	5	6	6	6	7	7	5	5	5	6	9	9	10
2	6	7	6	5	5	5	6	5	6	5	4	5	5	9	13
3	5	6	5	6	6	6	7	4	8	6	6	5	9	11	12
4	4	7	6	5	6	7	7	6	5	8	7	6	8	12	15
5	7	5	5	6	4	6	7	7	7	12	11	10	8	7	10
6	6	5	6	9	11	10	8	5	5	4	7	7	9	11	11
7	3	5	6	7	10	9	12	9	10	10	8	7	7	7	9
8	3	9	9	9	9	7	8	10	8	9	7	6	5	6	7
9	5	6	7	9	9	8	9	10	10	10	7	6	5	6	9
10	7	7	6	10	9	12	11	11	9	8	7	5	5	6	8
11	8	7	8	11	10	9	8	8	11	9	8	9	8	9	11
12	6	7	8	11	11	9	11	12	13	11	10	8	5	8	10
13	5	5	5	7	8	9	8	9	9	9	9	7	5	7	9
14	4	4	6	6	6	6	6	6	7	5	4	4	6	7	7
15	5	6	5	6	7	10	11	7	7	6	5	4	6	7	8
16	7	7	5	6	5	5	8	7	7	7	4	4	9	9	8
17	4	6	5	7	9	9	9	8	6	7	6	7	5	5	7
18	6	6	3	5	5	5	4	3	6	5	4	4	7	10	9
19	9	6	4	6	5	3	5	5	5	7	5	4	7	8	10
20	5	5	5	5	7	6	5	5	6	6	5	9	8	9	11
21	5	5	7	13	8	7	6	5	7	8	7	8	8	11	13
22	8	12	14	8	7	4	3	1	5	5	9	9	10	15	18
23	8	9	6	9	9	10	7	8	11	11	11	12	15	15	16
24	13	10	6	7	7	7	9	9	12	11	9	9	15	15	16
25	8	8	6	7	8	8	8	6	7	8	8	8	11	14	14
26	7	6	6	8	11	11	10	9	9	8	7	5	8	10	12
27	4	3	2	4	5	7	7	7	9	8	5	5	8	11	12
28	5	3	3	3	4	6	7	7	7	6	5	4	7	10	12
29	5	4	4	4	5	7	9	7	5	7	4	5	7	10	11
30	9	9	8	6	5	7	9	7	7	6	6	5	9	10	10
31	8	13	14	13	15	11	7	5	5	4	3	7	10	13	14
Mean ..	6·2	6·6	6·2	7·2	7·5	7·5	7·7	6·9	7·5	7·5	6·5	6·5	7·9	9·6	11·0

FEBRUARY.

1	7	10	11	10	11	9	8	4	4	3	4	5	10	12	11
2	13	14	11	10	12	10	7	5	3	4	5	6	12	16	18
3	7	7	7	7	7	7	7	5	6	5	7	7	11	13	15
4	8	8	7	7	6	7	6	8	8	4	8	10	12	10	10
5	7	14	16	8	11	12	8	7	6	8	9	10	14	15	15
6	11	13	10	10	10	12	10	7	10	12	13	14	12	13	14
7	6	7	8	8	6	7	7	6	7	8	12	12	11	12	12
8	6	7	7	5	7	7	7	6	7	10	10	12	13	12	12
9	6	3	4	4	6	7	7	4	4	5	3	5	10	13	14
10	3	2	2	2	1	1	1	1	3	3	5	7	11	12	12
11	7	7	4	5	5	5	6	6	6	5	6	8	11	12	12
12	3	6	12	12	6	8	7	7	6	5	8	10	11	11	12
13	7	5	5	7	7	7	7	7	8	8	6	8	11	13	16
14	7	5	6	6	7	7	6	6	8	6	6	12	12	15	15
15	10	7	5	6	8	7	8	6	7	8	9	14	13	12	15
16	11	12	12	6	5	5	5	6	7	5	6	5	8	11	13
17	9	11	9	5	5	8	9	7	8	7	7	6	11	12	13
18	7	8	9	9	9	8	7	6	5	5	4	6	10	11	12
19	3	4	4	5	5	4	3	5	7	6	6	6	7	9	10
20	6	4	4	3	4	5	5	6	5	5	5	6	8	12	13
21	7	7	5	5	7	7	7	5	6	7	7	6	11	12	13
22	6	5	7	4	3	5	8	6	6	4	4	5	6	7	7
23	3	4	4	4	3	5	7	8	9	10	8	8	10	11	10
24	4	7	8	5	5	7	9	7	8	9	7	5	7	9	9
25	6	7	7	9	12	11	12	13	10	7	5	5	6	7	8
26	5	5	5	5	6	8	8	8	8	7	10	12	12	11	11
27	8	7	6	8	9	7	7	10	10	9	13	12	12	13	13
28	5	3	4	5	4	7	6	7	8	4	4	5	5	9	11
Mean ..	6·7	7·1	7·1	6·4	6·7	7·1	7·0	6·4	6·8	6·4	7·0	8·1	10·2	11·6	12·4

(Averages for periods of sixty minutesom full hour to full hour of local mean time.)

JANUARY. (IN MILES PER HOUR)

Hours. (B. M. T.).									Daily Mean.	Mean by Beckley's.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
12	14	16	15	13	9	7	7	6	8·3	6·0	17 10	21	7 48	3	1
13	13	13	14	13	11	7	6	5	7·8	5·3	19 2	19	7 55	3	2
13	13	14	16	14	13	10	7	5	8·6	5·8	19 3	22	7 40	1	3
15	14	15	15	11	9	8	7	7	8·7	6·2	17 48	21	8 20	2	4
10	13	14	14	13	12	7	6	5	8·6	5·8	18 5	19	4 20	3	5
15	16	15	15	14	9	5	3	3	8·7	5·9	15 52	21	8 0	2	6
11	11	12	13	13	11	6	5	4	8·5	5·7	19 40	17	0 53	3	7
8	9	10	11	9	9	7	7	7	7·9	5·5	18 10	14	0 8	3	8
12	11	13	11	7	6	6	7	6	8·1	5·4	17 40	17	12 15	4	9
10	11	10	11	13	13	13	8	7	9·0	6·1	20 15	17	8 52	4	10
11	13	15	13	13	12	10	6	7	9·7	6·5	17 53	18	7 30	4	11
14	16	16	14	13	11	7	7	5	10·1	7·0	17 40	22	12 10	4	12
10	11	13	13	13	10	7	5	3	8·2	5·5	19 45	17	13 5	3	13
10	13	13	11	11	7	7	6	6	7·0	4·7	17 15	18	8 32	3	14
8	7	5	9	9	6	5	7	6	6·7	4·1	6 40	12	1 0	2	15
7	7	7	8	5	4	3	5	5	6·2	4·2	13 50	14	20 50	3	16
10	11	11	10	7	6	6	5	5	7·1	4·6	17 28	15	8 30	3	17
9	9	8	8	6	6	5	4	4	5·9	3·7	14 11	14	7 12	2	18
10	9	9	8	10	11	7	5	5	6·8	4·7	20 45	14	8 13	1	19
10	12	12	11	11	10	8	8	7	7·7	5·0	16 12	16	7 53	2	20
15	16	15	15	15	14	10	7	9	9·7	7·0	16 5	21	7 55	3	21
16	16	14	14	13	14	12	10	10	10·3	7·3	14 15	24	7 40	1	22
19	20	20	22	21	17	14	11	12	13·0	9·0	18 35	28	7 56	4	23
17	20	20	22	20	16	14	10	7	12·5	9·0	19 8	28	11 45	4	24
18	19	19	16	18	17	12	9	7	11·0	7·2	16 40	25	9 45	2	25
11	11	12	11	12	12	10	8	6	9·2	6·0	20 15	17	9 48	3	26
14	15	15	14	12	9	7	5	3	8·0	5·3	17 20	21	2 15	1	27
14	15	15	14	13	11	7	7	6	8·0	4·9	17 1	20	8 48	2	28
11	12	11	12	12	9	6	5	5	7·4	4·6	18 45	17	8 0	2	29
14	15	16	15	15	14	10	5	7	9·3	6·2	15 52	21	10 5	2	30
15	17	18	17	14	13	7	7	7	10·7	7·2	3 53	25	9 10	1	31
12·3	13·2	13·4	13·3	12·4	10·7	8·1	6·6	6·0	8·7	5·9					Mean.

FEBRUARY.

14	16	17	16	14	10	9	9	11	9·8	6·6	16 20	21	8 35	1	1
18	18	17	18	14	13	11	10	9	11·4	7·9	16 45	25	9 15	1	2
17	18	18	18	15	13	12	10	9	10·3	6·8	18 15	25	7 57	2	3
14	15	15	13	13	10	7	7	7	9·2	5·9	17 28	22	9 40	2	4
18	17	17	14	13	13	11	12	13	12·0	8·3	15 45	24	8 20	3	5
13	13	11	12	10	12	11	10	10	11·4	7·9	1 5	20	8 5	4	6
13	14	13	13	12	12	7	7	7	9·5	6·7	16 15	21	9 28	2	7
14	16	17	15	15	13	11	9	8	10·3	7·3	16 1	21	8 12	2	8
16	17	13	13	12	11	6	7	5	8·1	5·8	16 20	22	7 59	0	9
13	13	12	13	11	7	5	5	5	6·3	4·0	16 15	17	7 55	0	10
11	11	12	9	7	8	7	6	3	7·5	4·9	12 55	17	10 30	2	11
13	10	13	16	15	10	5	6	5	9·0	6·2	18 55	20	10 13	1	12
18	17	19	18	17	16	13	8	5	10·5	7·3	17 10	25	9 48	2	13
15	16	16	16	16	16	14	8	11	10·5	7·4	14 45	21	9 15	2	14
16	20	19	17	17	9	6	8	9	10·7	7·3	16 12	27	10 27	3	15
14	13	12	12	10	7	6	8	8	8·6	5·9	15 8	19	11 20	2	16
15	16	18	16	16	13	8	6	7	10·1	6·9	15 32	23	11 32	2	17
12	11	10	9	8	8	6	4	2	7·7	5·4	14 53	16	11 0	1	18
9	9	7	8	8	7	7	5	7	6·3	4·0	14 8	15	7 10	1	19
12	10	7	5	6	7	5	5	5	6·4	4·2	13 50	17	2 48	2	20
14	18	19	18	15	12	6	7	10	9·6	6·8	16 58	25	2 40	2	21
9	10	11	8	7	7	4	4	3	6·1	3·3	16 10	15	11 15	2	22
10	8	7	9	9	9	10	7	5	7·4	4·5	15 12	16	1 48	3	23
10	9	8	5	5	3	3	4	5	6·6	4·2	6 55	21	6 35	3	24
9	8	6	5	7	7	7	7	6	7·8	5·1	7 28	16	10 38	3	25
12	12	14	14	12	13	12	8	9	9·5	6·5	17 50	21	10 10	3	26
15	16	16	16	14	13	7	7	5	10·5	7·1	16 35	21	9 15	2	27
12	12	11	14	14	8	6	6	4	7·3	4·6	18 20	18	2 15	2	28
13·4	13·7	13·4	12·9	11·9	10·2	7·9	7·1	6·9	8·9	6·0					Mean.

WIND VELOCITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Date.	Hours (B. M. T.),														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	6	7	8	3	6	7	7	5	5	4	5	4	9	10	12
2	7	11	14	11	8	8	6	5	6	5	6	8	10	10	10
3	4	8	7	6	7	6	6	6	7	6	4	10	10	9	11
4	5	5	6	6	7	7	7	6	6	9	12	13	13	14	15
5	6	6	6	7	6	7	7	4	5	7	6	8	11	13	15
6	6	6	8	10	5	6	8	6	3	3	3	5	8	10	11
7	6	8	9	7	7	7	4	4	5	3	3	8	11	13	14
8	7	5	4	4	4	3	7	7	3	3	5	9	12	14	15
9	15	14	13	11	10	8	6	2	4	5	4	9	13	15	17
10	7	7	11	10	9	9	7	4	5	6	6	11	13	16	16
11	8	7	7	7	7	6	6	5	5	8	7	8	12	13	13
12	4	3	5	7	6	5	4	4	5	5	3	7	11	12	13
13	3	3	3	3	3	5	7	7	6	5	5	5	8	12	11
14	5	5	8	7	5	5	7	4	6	5	4	5	10	11	11
15	5	7	7	7	10	9	5	8	8	8	7	9	9	10	11
16	7	9	6	10	7	5	10	13	13	7	8	9	11	12	13
17	7	4	5	7	6	13	11	11	7	5	7	8	11	12	12
18	5	6	8	6	4	3	5	4	4	3	7	10	13	14	14
19	11	10	7	6	7	4	3	2	5	8	14	15	16	21	22
20	14	10	8	7	7	6	5	3	5	7	11	12	13	18	18
21	11	12	11	7	5	6	5	3	3	3	7	13	13	14	16
22	16	15	8	6	6	7	7	6	6	6	8	12	12	12	14
23	16	16	10	7	5	6	5	5	5	12	12	13	16	18	18
24	6	6	10	12	11	11	13	11	10	12	10	11	11	12	12
25	7	7	10	6	5	5	5	5	7	9	14	14	16	16	17
26	12	11	12	10	9	7	8	8	9	9	5	6	11	10	13
27	5	6	7	6	5	5	3	10	14	9	7	7	10	13	9
28	5	4	4	3	4	6	6	6	4	4	6	9	9	8	12
29	8	8	6	4	4	6	7	6	6	12	14	11	12	15	19
30	15	14	14	14	14	14	13	10	9	11	14	20	24	25	25
31	14	11	8	9	5	6	6	3	5	3	6	9	9	10	11
Mean ..	8·2	8·1	8·1	7·3	6·6	6·7	6·6	5·9	6·2	6·5	7·4	9·6	11·8	13·1	14·2

APRIL.

1	6	7	6	6	4	5	4	5	5	5	6	7	9	10	10
2	5	7	8	8	6	6	6	7	5	4	8	11	11	13	14
3	7	4	7	7	7	8	8	8	13	13	13	13	12	12	14
4	12	11	12	9	10	16	10	9	11	10	13	14	15	16	17
5	12	8	12	11	11	10	8	9	5	3	14	17	21	25	26
6	13	10	9	6	3	2	1	0	4	5	12	13	15	17	17
7	17	16	16	14	10	8	5	7	8	14	19	16	17	17	18
8	8	9	7	3	5	7	7	3	5	12	12	13	16	19	21
9	11	10	9	9	10	10	7	5	5	4	10	15	17	21	20
10	4	11	12	18	21	20	18	16	12	16	18	13	13	9	10
11	11	14	13	10	9	9	9	6	5	7	7	8	10	10	9
12	15	15	14	13	8	5	5	5	6	6	5	7	9	10	10
13	10	10	10	9	10	11	10	10	9	10	8	9	10	11	10
14	11	10	10	10	8	8	7	6	6	7	8	8	8	9	10
15	7	7	7	7	7	7	7	5	6	6	7	8	9	9	10
16	5	6	6	5	5	4	2	2	3	4	9	9	10	13	17
17	13	10	7	7	10	7	7	7	7	8	12	13	14	14	16
18	9	7	7	7	7	8	10	7	4	9	11	13	17	18	18
19	9	12	13	12	9	7	6	5	7	8	8	8	11	12	12
20	14	14	14	11	12	11	12	12	10	8	7	8	11	16	17
21	7	3	5	6	7	5	3	4	6	6	7	8	11	14	16
22	11	10	8	3	2	2	2	2	7	10	10	10	11	11	12
23	7	6	6	5	5	5	3	3	6	4	4	6	8	10	12
24	7	7	8	7	5	5	4	3	4	7	11	12	13	13	14
25	8	8	9	9	5	4	3	4	1	4	9	9	10	14	15
26	3	3	3	3	3	2	3	2	1	1	6	7	9	9	10
27	5	5	5	4	4	3	5	3	3	4	8	9	8	9	10
28	7	6	6	5	5	5	4	6	8	8	10	12	12	13	14
29	7	6	7	7	7	4	2	2	5	4	7	9	10	14	13
30	6	7	7	6	7	6	5	7	6	8	9	10	10	12	11
Mean .	8·9	8·6	8·8	7·9	7·4	7·0	6·1	5·7	6·1	7·2	9·6	10·5	11·9	13·3	14·1

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Hours (B. M. T.)									Daily Mean.	Mean by Beckley's.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
12	12	12	12	12	9	6	6	3	7·6	4·9	16 12	18	7 45	2	1
11	12	11	8	7	7	6	7	4	8·3	5·6	2 2	20	10 3	2	2
11	11	10	11	10	12	9	9	6	8·2	5·4	15 12	16	7 20	2	3
16	16	15	12	11	7	6	6	6	9·4	6.3	15 10	23	8 12	1	4
15	14	15	14	13	13	10	8	7	9·3	6·3	14 5	21	11 5	1	5
14	16	17	15	11	6	4	3	4	7·8	5·3	15 20	21	10 25	1	6
14	13	12	10	8	6	4	5	5	7·7	5·1	15 15	19	10 15	1	7
19	19	17	16	14	11	8	9	15	9·6	6·7	15 28	27	9 55	0	8
17	17	18	18	18	13	9	10	8	11·4	7·8	14 48	26	7 40	1	9
17	19	18	16	12	11	8	6	6	10·4	7·0	15 50	26	7 46	1	10
13	13	13	13	12	6	3	5	6	8·5	5·7	13 28	18	8 10	1	11
13	11	9	8	6	4	3	5	5	6·6	4·5	14 12	17	10 48	2	12
12	9	5	5	10	12	9	5	5	6·6	4·5	14 8	16	11 43	1	13
11	12	11	8	6	6	4	5	4	6·9	4·8	17 45	17	7 25	0	14
11	11	10	7	5	6	6	7	5	7·8	5·0	14 55	17	20 25	1	15
10	10	10	6	4	2	4	9	11	8·6	6·0	3 2	21	20 10	1	16
12	11	10	8	4	5	5	3	3	7·8	5·3	16 4	16	1 25	2	17
13	13	14	16	17	14	9	12	12	9·4	6·3	19 32	24	9 56	0	18
24	24	22	20	18	14	10	11	12	12·7	9·1	15 20	31	6 58	0	19
18	17	18	18	14	10	8	7	10	10·8	7·7	14 50	27	7 5	2	20
16	17	16	16	13	10	8	13	14	10·5	7·4	16 18	26	8 47	0	21
16	15	15	13	10	11	12	16	16	11·0	7·9	15 33	26	10 7	2	22
18	16	15	17	14	11	6	6	4	11·3	8·0	14 25	27	8 29	0	23
12	10	9	6	6	7	8	8	8	9·7	6·8	15 8	19	0 5	3	24
18	18	19	17	17	16	11	11	10	11·7	8·3	16 37	26	9 0	2	25
12	12	10	9	8	7	5	5	5	8·9	6·7	1 50	17	11 35	2	26
7	5	5	6	7	7	9	8	6	7·3	4·8	13 35	18	11 33	2	27
13	12	13	13	12	12	12	11	8	8·2	6·1	18 26	17	9 20	0	28
22	22	21	18	17	16	14	13	14	12·3	9·0	16 15	28	9 3	2	29
25	28	27	23	19	16	13	16	12	17·3	12·5	16 35	37	7 52	4	30
11	9	6	5	7	6	5	5	4	7·2	5·2	0 15	17	7 10	1	31
14·6	14·3	13·6	12·4	11·0	9·5	7·5	8·1	7·7	9·4	6·5					Mean.

APRIL.

9	9	9	9	7	6	5	5	3	6·5	4·7	13 50	14	10 5	0	1
11	11	8	8	12	11	10	12	9	8·8	6.7	14 33	18	10 0	0	2
14	15	12	8	7	8	8	14	17	10·4	8·2	23 25	22	1 42	4	3
18	19	19	18	16	13	8	11	13	13·3	10·7	16 6	28	6 15	4	4
22	18	14	12	14	16	17	19	16	14·2	11.0	14 38	34	9 15	0	5
17	19	20	16	15	13	11	16	15	11·2	8·5	17 8	28	6 45	0	6
17	19	14	11	10	13	13	10	3	13·0	9·7	16 18	26	8 12	2	7
21	20	19	17	16	12	11	14	15	12·2	9·1	15 4	28	8 40	0	8
20	21	20	19	14	6	8	5	5	11·7	8·8	14 5	27	9 42	2	9
12	10	9	7	6	7	6	7	9	11·8	7·5	3 55	31	0 57	2	10
8	8	7	7	12	12	13	10	13	9·5	5·9	1 57	19	7 50	1	11
7	6	5	5	6	7	9	10	10	8·3	5·0	1 23	21	9 20	1	12
8	9	9	11	11	13	11	10	11	10·0	5·4	13 10	19	8 45	2	13
9	7	7	6	7	8	7	6	6	7·9	4·6	0 30	15	8 53	2	14
8	9	8	7	7	6	6	5	6	7·1	4·2	14 10	15	7 58	1	15
18	16	15	13	10	8	9	13	15	9·0	6·9	15 8	24	7 50	0	16
14	15	12	10	9	6	13	13	9	10·5	8·5	16 9	23	9 15	1	17
18	19	20	18	14	9	8	3	4	11·0	8·5	16 5	26	8 10	1	18
10	9	5	3	6	9	8	12	15	9·0	6·4	2 17	18	10 3	1	19
15	11	13	11	14	17	16	12	9	12·3	9·7	20 49	25	10 50	1	20
16	16	17	15	13	11	6	5	10	9·0	7·0	17 18	27	7 32	0	21
14	13	15	11	11	10	7	5	5	8·4	6·6	17 22	21	7 30	0	22
13	12	12	12	11	9	7	5	5	7·3	5·6	16 1	19	10 37	1	23
14	15	14	12	11	10	9	7	9	9·2	7·1	17 57	20	7 20	0	24
15	13	11	10	10	8	6	5	4	8·1	6·5	14 12	21	8 10	0	25
11	11	11	10	7	7	5	4	5	5·7	4·3	15 55	15	7 20	0	26
12	9	8	6	5	5	6	5	5	6·1	4·7	15 34	16	7 55	0	27
14	14	12	10	10	10	8	6	6	8·8	7·2	15 29	19	6 15	2	28
14	12	13	11	10	8	8	8	6	8·1	6.4	13 33	19	6 55	0	29
12	11	9	8	8	10	11	9	9	8.5	6·6	13 50	17	6 25	2	30
13·7	13·2	12·2	10·7	10·3	9·6	9·0	8·9	8·9	9·6	7·1					Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN MILES PER HOUR.)

Date.	Hours (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	9	10	9	9	5	3	3	6	7	7	7	7	8	9	15
2	9	9	8	7	4	3	7	8	5	5	10	12	13	15	16
3	14	15	14	11	5	7	7	10	9	9	11	12	12	13	14
4	7	8	6	6	4	3	3	4	9	11	10	10	13	13	13
5	6	4	3	3	3	3	2	1	3	4	6	8	10	12	13
6	3	4	5	5	3	3	2	2	4	5	6	8	10	12	13
7	7	4	2	2	3	2	1	3	3	5	8	10	10	11	13
8	6	6	5	5	8	7	6	5	7	8	10	11	11	13	14
9	9	8	8	9	10	10	9	9	10	13	16	16	14	15	16
10	8	7	7	8	8	7	7	7	8	9	12	14	16	17	18
11	3	3	3	2	5	4	3	3	3	7	8	12	14	14	15
12	3	3	2	6	9	4	3	3	4	7	9	7	7	9	10
13	3	2	1	1	1	0	1	2	4	2	6	11	13	15	15
14	5	3	3	3	6	8	5	7	7	5	7	10	13	14	13
15	17	9	4	8	12	9	9	15	15	21	22	17	6	9	9
16	8	3	2	3	3	4	7	5	3	2	5	7	11	13	19
17	13	15	13	12	12	15	17	18	18	21	27	32	33	30	30
18	19	24	23	23	19	20	18	15	13	13	11	12	11	11	10
19	11	9	7	5	5	5	4	9	11	13	13	13	12	10	11
20	9	11	10	13	10	7	11	11	11	11	10	8	6	9	9
21	5	4	5	5	5	4	3	2	3	5	5	7	8	9	8
22	6	4	6	6	5	4	3	2	4	4	6	7	8	9	11
23	5	5	5	5	7	5	4	5	7	7	6	8	9	11	12
24	8	8	8	6	5	5	3	5	5	7	6	7	10	10	10
25	9	8	7	8	8	7	7	7	7	7	6	7	7	8	7
26	5	6	6	5	3	2	1	3	5	5	5	6	7	8	8
27	7	7	7	6	5	5	3	2	3	4	5	5	7	10	11
28	5	4	5	3	3	3	2	2	5	7	9	11	13	15	16
29	7	2	8	7	3	8	6	5	8	9	7	10	11	13	15
30	10	7	5	3	2	1	4	3	6	8	9	8	9	10	13
31	7	5	6	6	7	6	7	7	5	5	4	7	9	12	11
Mean ..	7·8	7·0	6·5	6·5	6·1	5·6	5·4	6·0	6·8	7·9	9·1	10·3	11·0	12·2	13·2

JUNE.

1	8	11	13	12	12	10	5	2	5	5	3	4	5	4	1
2	7	9	11	10	7	9	11	9	7	7	14	13	13	14	12
3	16	15	15	13	13	14	13	12	13	14	20	16	16	16	17
4	10	12	10	10	10	9	8	9	12	18	21	20	14	9	10
5	11	9	9	9	9	7	6	7	9	8	9	8	8	7	7
6	10	10	12	10	8	9	8	7	8	7	7	9	9	9	9
7	8	7	7	7	7	10	10	13	14	14	13	13	12	8	8
8	11	2	10	7	9	7	5	6	5	6	4	4	7	5	6
9	5	5	5	6	10	11	9	8	8	7	8	7	8	9	9
10	7	5	9	8	9	10	9	9	10	9	8	7	10	12	12
11	15	15	14	13	12	11	9	7	11	11	11	12	13	13	13
12	9	9	10	10	9	10	9	8	8	7	8	9	10	10	11
13	7	7	9	8	8	6	6	5	7	8	7	9	9	9	10
14	9	8	9	8	6	5	3	4	6	5	7	8	8	10	11
15	7	7	5	6	2	1	4	8	6	6	3	5	7	9	9
16	7	5	4	5	4	8	9	8	8	8	7	11	10	8	7
17	12	10	13	13	12	7	5	3	7	8	12	12	17	18	11
18	18	16	15	15	14	13	12	14	14	17	21	24	23	24	21
19	17	18	16	12	15	15	15	11	18	16	18	23	22	26	24
20	19	19	19	20	19	18	18	24	26	21	20	22	21	19	18
21	19	20	13	11	14	13	21	23	21	21	17	23	25	15	16
22	13	13	14	15	9	10	12	16	12	13	14	15	17	17	17
23	16	17	16	16	15	15	15	15	15	16	16	14	14	15	17
24	15	12	12	17	10	9	12	13	16	17	13	10	10	11	18
25	14	15	16	16	15	15	14	17	18	17	15	15	14	15	13
26	14	16	17	15	16	16	16	18	16	16	16	16	20	16	16
27	16	16	18	17	16	21	22	14	15	17	17	18	16	14	15
28	18	20	19	16	16	16	14	16	16	15	21	14	20	17	18
29	17	17	18	15	16	15	15	14	14	13	13	12	12	13	13
30	15	15	15	16	15	15	13	14	13	13	12	13	12	13	14
Mean ..	12·3	12·3	12·4	11·9	11·2	11·2	10·9	11·1	11·9	12·0	12·5	12·9	13·4	12·8	12·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN MILES PER HOUR.)

Hours. (B. M. T.)									Daily Mean.	Mean by Beckley's.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
14	13	12	9	9	10	10	10	8	8·7	6·8	14 44	21	6 38	0	1
18	18	18	16	13	13	10	9	10	10·7	8·2	16 24	27	9 10	0	2
14	14	14	10	9	9	7	6	5	10·5	8·4	1 20	22	23 7	3	3
14	13	10	8	9	6	5	3	3	8·0	5·4	13 12	19	6 20	1	4
14	14	11	11	10	7	6	6	5	6·9	5·6	15 8	19	6 34	0	5
14	12	12	10	9	8	6	5	7	7·0	5·5	14 46	18	6 50	0	6
14	13	11	8	7	7	5	5	5	6·6	5·0	15 30	19	7 25	0	7
15	15	14	15	9	10	9	9	10	9·5	7·6	18 28	21	7 43	1	8
17	16	15	14	10	6	9	8	8	11·5	9·0	15 20	27	7 12	2	9
18	16	13	10	9	7	6	5	3	10·0	8·0	15 35	24	9 48	2	10
13	16	13	7	7	7	5	5	3	7·3	5·6	14 10	21	7 10	0	11
10	11	9	6	6	8	6	5	5	6·3	4·7	16 47	15	8 35	0	12
16	14	12	10	11	6	6	6	3	6·7	5·4	15 50	22	6 50	0	13
10	9	8	11	10	7	5	21	30	9·2	7·0	22 50	50	9 50	0	14
8	11	10	8	5	5	4	3	6	10·1	8·3	9 57	29	1 20	2	15
18	18	14	3	6	8	13	14	12	8·4	6·4	16 45	33	8 53	0	16
30	31	29	28	31	25	22	20	24	22·7	20·1	14 27	50	22 30	9	17
10	8	11	11	9	9	10	11	12	13·9	10·2	1 54	34	16 40	3	18
11	10	10	11	7	7	7	9	8	9·1	6·5	23 50	24	6 31	0	19
8	7	7	7	6	5	5	5	5	8·4	6·2	3 5	17	11 52	1	20
9	9	9	10	8	8	7	7	6	6·3	4·5	17 31	13	7 15	0	21
11	12	13	13	11	8	7	7	6	7·2	6·0	17 45	18	7 35	0	22
13	13	13	12	12	11	8	8	7	8·3	6·7	15 50	18	7 45	2	23
11	11	12	11	9	9	8	9	10	8·0	6·0	17 9	15	6 50	2	24
8	7	7	7	6	7	7	7	6	7·2	3·8	0 13	13	8 50	0	25
9	9	9	8	6	6	6	6	6	5·8	3·5	17 20	14	10 16	0	26
10	11	12	11	9	8	8	7	7	7·1	5·2	16 25	15	7 50	0	27
14	12	12	10	8	8	3	3	5	7·4	6·0	14 53	22	7 3	0	28
14	12	9	9	7	6	4	5	8	8·0	6·4	14 27	20	1 20	1	29
14	15	13	12	7	7	7	4	7	7·7	6·5	16 35	19	5 55	1	30
12	12	10	12	13	9	5	3	4	7·7	5·9	16 10	21	10 32	0	31
13·3	13·0	12·0	10·6	9·3	8·3	7·3	7·5	7·9	8·8	6·8					Mean.

JUNE.

2	2	3	2	1	3	4	7	5	5·4	4·3	2 54	15	14 10	0	1
16	18	20	18	16	16	15	13	15	12·5	9·5	17 50	25	9 32	2	2
15	14	13	11	13	11	10	12	6	13·7	10·7	11 7	24	23 20	3	3
9	11	11	11	11	9	8	9	8	11·2	8·0	11 10	27	22 12	3	4
8	8	8	9	10	8	8	10	9	8·4	4·6	22 45	22	11 0	1	5
8	8	7	7	7	7	8	10	8	8·4	4·7	2 25	20	10 6	1	6
8	9	8	7	6	7	6	7	11	9·2	6·4	5 58	17	4 2	3	7
7	7	6	5	6	4	5	5	5	6·4	4·4	2 50	15	14 2	2	8
9	9	9	8	7	7	6	7	7	7·7	4·8	4 52	15	11 10	2	9
12	10	11	10	12	12	11	12	13	9·9	7·2	0 50	26	0 56	2	10
11	11	11	11	10	9	9	8	8	11·2	9·3	1 40	20	7 10	4	11
11	12	10	8	8	8	8	7	7	9·0	6·5	15 2	16	9 20	2	12
9	9	9	9	9	7	6	7	8	7·8	4·5	12 50	15	9 40	1	13
11	11	8	7	6	5	6	3	6	7·1	4·0	14 50	17	6 45	0	14
9	9	7	7	8	8	9	7	9	6·6	4·3	23 40	18	5 34	0	15
8	7	6	8	9	12	11	11	14	8·1	5·9	21 57	22	1 38	1	16
13	14	13	14	13	15	17	16	17	12·2	8·4	12 52	26	7 22	0	17
17	14	17	20	20	20	18	18	17	17·6	14·3	11 17	30	1 55	6	18
24	26	27	28	25	18	17	17	21	19·5	17·5	17 45	35	7 31	4	19
18	19	18	14	15	17	15	16	18	18·9	14·8	7 35	41	14 47	4	20
10	7	12	8	9	14	10	6	14	15·1	11·0	1 33	36	22 6	0	21
17	17	17	17	16	14	15	15	16	14·6	8·9	7 48	36	6 11	3	22
16	19	23	18	19	20	17	16	15	16·5	9·8	16 8	45	12 54	4	23
14	16	15	11	16	15	15	13	13	13·5	7·8	14 36	35	5 12	3	24
14	16	17	16	16	20	16	11	9	15·2	9·2	19 15	44	7 12	5	25
16	17	17	15	13	16	13	15	15	15·9	9·4	20 32	38	20 47	6	26
14	16	16	16	18	22	19	18	17	17·0	10·6	0 30	42	8 22	7	27
15	11	14	16	18	16	15	16	17	16·4	10·2	0 24	42	16 47	4	28
13	14	13	15	12	13	15	15	14	14·2	8·9	18 33	29	11 15	5	29
14	13	12	13	15	14	13	12	12	13·6	8·7	1 7	29	6 40	6	30
12·3	12·5	12·6	12·0	12·1	12·2	11·5	11·3	11·8	12·1	8·3					Mean.

WIND VELOCITY, 1933.

JULY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN MILES PER HOUR.)

Date.	Hours. (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	11	12	11	11	12	12	11	11	11	11	11	11	12	11	12
2	12	12	13	14	13	13	14	12	11	11	11	12	10	9	9
3	11	11	11	12	11	11	12	12	11	12	12	10	10	12	12
4	13	14	15	14	14	13	14	13	14	13	12	12	13	13	12
5	15	15	15	14	14	14	14	13	13	13	12	12	12	13	13
6	14	13	14	14	14	14	13	14	12	12	12	12	12	12	13
7	12	12	12	13	13	12	12	9	10	11	12	13	14	16	16
8	16	16	13	12	13	14	14	14	13	12	11	10	10	12	12
9	14	13	14	15	14	13	13	13	13	13	13	14	14	14	14
10	15	15	14	14	14	13	11	12	13	14	13	12	9	11	14
11	13	13	14	15	15	15	14	15	14	15	14	13	14	13	13
12	15	15	14	15	16	14	8	13	10	10	9	11	12	12	13
13	12	12	12	11	10	10	11	14	14	9	6	2	2	2	11
14	5	7	10	10	12	14	8	9	7	6	8	13	16	18	17
15	14	13	14	15	12	12	15	14	15	16	16	16	18	21	19
16	13	14	19	20	17	18	18	19	14	10	11	11	15	15	16
17	21	14	13	8	13	16	15	16	13	11	14	15	16	26	7
18	13	14	14	14	13	14	16	16	16	16	16	15	15	14	16
19	16	14	14	15	16	17	15	17	17	16	15	16	18	17	16
20	17	15	16	15	16	16	16	16	15	16	14	13	14	13	13
21	11	11	11	10	10	10	9	8	10	8	10	9	9	8	8
22	9	7	9	7	7	8	8	7	6	6	6	6	7	9	8
23	7	8	9	9	8	9	8	9	8	8	8	8	9	8	8
24	14	12	12	14	13	12	13	14	12	14	12	14	14	15	15
25	18	17	17	18	20	18	21	19	17	20	15	16	13	19	19
26	19	20	20	21	16	17	19	20	19	19	20	21	19	18	15
27	18	17	21	21	22	22	24	25	29	20	21	21	18	21	20
28	17	16	16	20	23	17	20	22	17	17	17	19	18	18	17
29	20	19	19	23	23	20	17	18	17	17	16	17	17	18	17
30	16	14	16	15	12	13	16	17	19	14	15	15	15	17	18
31	16	17	17	19	22	20	16	16	13	14	16	18	17	15	19
Mean . .	14·1	13·6	14·2	14·5	14·5	14·2	14·0	14·4	13·6	13·0	12·8	13·1	13·3	14·2	13·9

AUGUST.

1	23	23	23	21	17	16	22	20	21	20	18	18	22	19	21
2	23	22	23	22	20	18	20	19	17	16	18	21	21	20	20
3	18	17	18	18	20	19	18	17	17	17	18	17	16	18	17
4	23	24	22	22	21	21	21	20	22	17	13	15	17	15	15
5	17	16	17	18	16	18	20	16	19	16	16	17	15	17	16
6	21	21	19	20	20	19	17	18	16	15	17	17	17	17	16
7	17	17	16	18	16	17	17	15	15	16	17	16	15	16	14
8	12	12	14	14	14	14	13	14	12	14	14	15	16	14	15
9	13	13	14	15	15	16	19	19	9	18	11	13	20	14	16
10	15	15	14	16	18	17	17	18	19	20	20	21	21	22	20
11	14	14	14	15	16	16	17	18	17	17	16	17	17	17	16
12	9	10	9	8	8	8	9	7	7	9	10	10	10	9	7
13	6	7	9	9	8	6	8	7	8	9	8	10	10	8	8
14	12	14	13	12	12	12	12	12	12	12	14	14	13	14	9
15	14	12	12	14	14	12	9	8	10	8	9	10	14	13	13
16	13	13	12	12	11	12	13	14	20	15	14	10	13	15	14
17	11	11	12	11	11	11	10	11	10	9	9	9	10	10	9
18	9	9	8	7	6	3	7	8	6	5	5	6	7	7	8
19	7	6	6	4	5	6	5	4	4	5	7	9	8	9	9
20	5	4	5	6	7	6	7	7	7	8	8	9	10	11	11
21	8	10	10	10	9	9	7	6	5	5	4	5	10	10	11
22	6	4	4	5	5	4	4	5	6	7	5	5	9	11	13
23	8	6	8	6	3	3	3	5	9	10	11	9	9	8	11
24	6	7	11	10	9	10	10	12	11	11	9	7	9	9	7
25	7	7	11	9	8	14	12	11	10	14	16	17	12	7	7
26	10	10	14	11	14	14	13	11	10	9	8	9	11	10	13
27	14	10	14	14	14	13	11	10	9	9	7	9	9	8	10
28	9	11	11	11	12	11	12	13	11	12	9	11	13	12	12
29	11	11	9	9	11	10	9	8	6	7	7	7	9	10	10
30	5	3	8	5	4	3	5	5	7	8	7	7	7	7	7
31	5	3	3	4	5	6	4	4	7	4	6	7	9	11	13
Mean . .	12·0	11·7	12·4	12·1	11·9	11·7	12·0	11·7	11·6	11·7	11·3	11·8	12·9	12·5	12·5

JULY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.) (IN MILES PER HOUR.)

Hours. (B. M. T)									Mean.	Mean by Backley's.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
11	12	11	11	11	10	10	10	10	11·1	8·1	7 53	18	0 50	6	1
10	12	11	11	10	10	11	11	11	11·3	8·2	6 12	19	16 7	4	2
12	10	11	12	12	12	12	12	12	11 5	7·1	14 22	19	16 10	3	3
12	11	14	14	13	13	13	12	14	13·1	7·3	23 36	24	23 15	3	4
13	14	14	15	14	14	13	12	12	13·5	8·3	16 59	25	14 47	5	5
13	12	12	12	13	12	13	11	12	12·7	9·3	1 50	21	12 50	6	6
16	16	16	15	17	17	17	17	16	13·9	11·5	18 46	24	7 55	5	7
13	16	16	16	14	13	11	13	14	13·3	9·6	0 7	22	10 2	7	8
14	14	14	14	14	13	14	14	14	13·7	7·8	3 35	23	21 47	5	9
13	12	11	10	9	8	11	12	12	12·2	7·7	0 34	23	12 52	4	10
15	14	12	11	9	12	13	13	14	13·5	10·5	0 42	21	18 59	4	11
14	14	13	14	14	13	12	11	13	12·7	9·0	3 54	28	6 50	4	12
9	14	13	12	12	9	13	14	6	10·0	6·9	0 12	26	11 10	1	13
17	16	15	15	13	13	10	10	13	11·7	8·7	22 5	32	0 22	2	14
18	17	18	17	17	17	15	14	14	15·7	10·0	22 44	32	23 40	6	15
20	20	21	17	18	16	15	19	21	16·5	10·3	17 6	**43**	11 25	4	16
10	13	16	17	14	14	14	14	14	14·3	8·8	13 2	41	15 0	3	17
16	17	16	17	16	17	16	16	17	15·4	9·0	21 55	36	0 55	5	18
17	16	16	16	17	17	16	17	17	16·2	9·6	3 45	33	2 25	5	19
12	12	12	12	13	12	13	12	10	13·9	8·3	5 47	37	15 28	4	20
8	8	8	8	8	9	7	8	8	8·9	4·9	0 16	18	10 8	2	21
7	7	7	6	7	7	7	5	6	**7·0**	**3·9**	3 2	20	8 0	1	22
8	10	11	9	12	12	11	13	14	9·3	5·1	1 25	22	3 1	3	23
16	14	15	15	15	15	16	17	17	14·2	8·3	7 42	28	0 55	6	24
18	15	17	16	15	15	19	14	18	17·3	10·3	9 29	41	20 12	6	25
16	17	16	15	16	17	15	16	17	17·8	10·9	0 36	43	22 4	5	26
20	20	21	22	21	20	19	16	16	**20·6**	**14·2**	6 41	43	0 45	7	27
20	18	19	20	19	18	19	17	16	18·4	12·1	5 0	40	2 33	6	28
15	14	15	16	15	16	16	14	17	17·3	13·7	4 15	38	18 38	6	29
14	15	15	14	15	14	14	14	17	15·2	11·0	8 20	31	9 54	6	30
22	18	20	21	18	17	16	19	22	17·8	12·6	21 16	35	9 50	6	31
14·2	14·1	14·4	14·2	13·9	13·6	13·6	13·5	14·0	13·9	9·1					Mean.

AUGUST.

23	20	20	20	20	19	21	22	21	20·4	**14·0**	1 47	42	5 32	7	1
22	21	**25**	22	23	20	19	21	18	**20·5**	13·3	20 49	**45**	9 57	8	2
19	18	20	22	20	21	21	21	22	18·7	12·7	18 14	42	13 20	8	3
17	18	17	16	16	15	16	17	17	18·2	12·9	0 20	41	10 38	6	4
17	16	16	16	15	15	16	18	20	16·8	10·5	23 45	38	2 42	8	5
14	14	15	14	13	16	16	16	15	16·8	9·1	2 58	37	14 50	5	6
14	15	13	10	13	12	13	12	11	14·8	8·0	4 48	32	18 15	5	7
13	13	14	12	12	13	12	11	13	13·3	7·5	12 3	29	0 5	5	8
17	15	15	15	15	16	14	15	15	15·1	11·3	12 10	36	8 20	5	9
17	15	14	13	12	14	13	13	14	16·6	13·0	12 22	29	2 51	8	10
16	16	16	14	13	10	9	9	10	14·7	8·7	5 23	28	23 45	4	11
7	8	8	8	8	10	12	7	8	8·6	4·6	21 24	22	9 50	3	12
8	9	10	10	10	11	11	9	12	8·8	4·7	23 57	26	9 55	3	13
10	12	13	14	14	14	12	11	12	12·5	6·7	13 30	23	9 55	5	14
9	10	10	14	12	11	12	13	12	11·5	6·0	2 28	25	10 47	3	15
12	15	13	12	12	12	12	13	11	13·0	7·7	7 56	28	9 42	5	16
9	10	9	8	7	8	7	7	9	9·5	6·2	2 50	15	8 35	5	17
9	8	9	8	8	7	5	5	6	6·9	4·8	4 46	16	10 7	3	18
9	8	7	7	5	6	6	5	4	6·3	4·3	11 36	14	3 41	3	19
10	10	9	9	9	7	8	7	8	7·8	5·9	14 31	15	1 55	3	20
11	10	9	9	7	7	7	5	5	7·9	5·5	12 10	17	7 7	3	21
11	9	7	7	9	6	5	6	5	6·6	4·5	14 10	17	11 10	3	22
9	7	6	3	**2**	2	3	3	3	**6·1**	4·0	14 10	14	6 10	2	23
7	7	8	11	11	8	9	7	5	8·8	6·4	10 2	15	11 50	2	24
3	8	8	9	10	8	12	11	11	10·1	7·0	9 52	25	15 16	2	25
12	11	11	10	9	9	8	9	10	10·7	6·8	2 15	20	10 7	3	26
11	13	13	12	13	14	13	12	11	11·4	7·5	3 49	23	10 43	4	27
11	11	12	12	10	11	9	9	10	11·0	8·3	7 25	19	10 52	5	28
10	9	8	8	7	7	8	6	5	8·4	6·0	0 44	15	9 50	3	29
8	9	9	8	5	5	5	5	5	6·1	**3·6**	2 37	15	6 0	3	30
13	12	9	10	11	10	11	10	9	7·7	5·2	14 12	18	10 6	**1**	31
12·2	12·2	12·0	11·7	11·3	11·1	11·1	**10·8**	10·9	11·8	7·6					Mean.

WIND VELOCITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN MILES PER HOUR.)

Date.	Hours (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	8	8	7	7	6	5	3	3	4	5	7	7	10	12	13
2	9	9	8	7	8	7	6	7	5	5	6	7	11	13	13
3	5	5	5	5	4	6	8	8	7	5	3	4	7	8	10
4	6	4	7	5	5	5	3	3	5	5	5	7	8	11	13
5	3	3	3	2	5	5	5	7	9	7	12	11	14	17	15
6	9	11	7	5	4	4	3	3	4	5	9	9	10	13	15
7	3	3	3	4	5	3	2	4	7	9	5	4	9	9	8
8	5	7	5	3	4	5	4	6	7	7	6	5	6	9	11
9	8	5	4	3	6	7	8	7	7	6	5	7	10	13	19
10	9	10	14	14	13	13	21	24	24	23	23	22	22	22	21
11	13	13	13	15	17	17	16	14	17	21	21	20	16	17	16
12	13	13	13	15	13	14	11	12	13	11	11	9	11	10	14
13	12	12	13	13	15	11	9	17	17	14	17	19	21	19	20
14	18	17	18	15	17	17	17	17	18	21	24	25	23	24	22
15	8	15	10	11	14	16	16	17	19	21	20	20	16	17	16
16	17	19	16	14	15	13	15	15	16	16	21	19	17	13	18
17	18	17	18	18	21	24	21	25	23	23	20	21	23	23	22
18	20	22	21	22	21	18	18	18	18	20	20	19	18	20	19
19	12	13	14	14	12	12	12	12	11	11	12	13	14	11	13
20	11	12	11	10	10	9	8	9	8	10	9	9	9	8	10
21	12	12	11	11	12	14	14	12	14	13	13	12	11	12	13
22	12	12	11	11	11	10	10	14	13	12	10	11	15	15	14
23	10	11	11	12	11	12	12	12	11	10	8	10	11	12	11
24	12	12	12	10	13	11	12	10	9	10	11	10	12	11	11
25	8	8	7	8	9	9	9	9	7	6	7	8	8	9	8
26	4	4	4	4	6	9	9	9	9	8	5	6	6	6	8
27	4	5	5	6	7	10	9	6	8	8	5	8	11	12	13
28	8	8	7	7	8	6	6	10	11	10	14	16	16	17	17
29	8	9	11	9	7	6	4	4	6	6	3	5	9	11	13
30	12	22	9	6	7	7	11	6	8	11	8	7	6	6	11
Mean . .	9·9	10·7	9·9	9·5	10·2	10·2	10·1	10·7	11·2	11·3	11·3	11·7	12·7	13·3	14·2

OCTOBER.

1	7	7	4	9	6	9	5	8	7	4	3	6	7	10	11
2	8	6	19	16	15	5	7	10	9	9	5	6	10	13	13
3	6	6	8	7	6	6	8	8	8	7	3	7	10	11	12
4	9	9	11	9	8	5	3	4	5	9	6	6	7	7	6
5	9	8	7	6	8	6	7	8	6	7	10	11	12	13	15
6	6	5	5	4	4	6	5	7	7	9	8	9	9	11	15
7	8	6	6	6	6	7	6	6	7	7	4	4	5	7	9
8	10	7	7	5	3	4	7	5	5	6	5	7	9	10	12
9	9	4	8	13	11	8	4	3	4	5	4	5	9	11	13
10	8	7	4	5	8	10	7	8	8	5	5	5	6	10	9
11	9	8	9	12	13	15	13	12	10	7	4	4	6	6	7
12	6	7	8	8	8	8	9	6	4	4	4	4	7	8	13
13	9	9	11	10	9	11	10	9	7	6	5	5	5	7	10
14	12	13	11	10	9	9	7	7	7	4	3	6	8	11	11
15	22	13	5	7	9	10	9	10	10	9	9	9	7	6	8
16	6	9	6	6	5	5	5	6	5	4	4	6	9	11	11
17	7	8	8	8	7	6	5	6	6	5	4	4	6	10	13
18	7	9	9	7	7	4	5	4	7	5	4	5	7	9	11
19	4	4	5	4	3	2	3	3	5	5	7	10	7	8	9
20	7	9	10	12	11	10	8	7	7	6	4	4	11	15	20
21	14	15	16	16	13	11	17	21	18	6	6	7	6	7	6
22	12	12	11	10	13	15	12	8	4	6	6	5	5	6	7
23	0	7	6	5	8	9	9	9	9	8	11	12	14	14	16
24	9	11	11	11	9	9	7	5	6	8	5	5	10	12	13
25	8	7	7	5	5	5	5	6	6	6	4	5	6	8	11
26	4	5	7	6	6	6	7	7	9	8	7	6	5	6	8
27	5	5	6	6	7	8	8	7	6	9	7	5	5	7	8
28	4	5	7	9	10	7	7	5	4	5	4	5	7	10	11
29	7	9	12	11	13	13	12	12	11	10	5	6	9	8	9
30	7	7	9	12	12	14	14	14	13	11	11	9	9	8	9
31	7	7	11	10	10	11	10	9	10	10	8	8	7	7	9
Mean . .	7·9	7·9	8·5	8·5	8·5	8·2	7·8	7·7	7·4	6·8	5·6	6·3	7·7	9·3	10·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN MILES PER HOUR.)

Hours (B. M. T.)									Mean.	Mean by Beckley's	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
13	14	13	12	11	10	9	9	8	8·5	5·7	14 30	18	7 2	1	1
12	13	11	10	9	9	8	7	7	8·6	6.2	15 30	17	8 50	2	2
11	11	11	8	10	8	6	5	3	6·8	4·5	17 35	15	10 0	1	3
17	16	15	12	9	7	7	6	5	7·7	5·4	15 39	24	7 54	2	4
13	13	9	8	4	7	7	9	12	8·3	5·6	13 15	23	3 0	1	5
14	15	12	5	5	5	4	3	3	7·4	5·0	16 50	27	9 37	1	6
11	7	7	12	14	14	7	5	4	**6·6**	4·3	19 40	20	7 5	2	7
18	17	16	8	5	5	4	13	14	7·9	5·1	15 50	27	21 20	2	8
18	15	12	7	9	9	11	17	11	9·3	6·5	14 37	27	8 54	3	9
21	21	19	11	10	11	11	13	11	16·8	13·1	7 11	32	0 50	5	10
15	14	15	15	15	15	12	13	13	15·5	10·9	13 25	26	16 2	7	11
15	17	16	11	8	7	8	10	11	11·9	7·7	17 8	28	23 6	5	12
21	21	17	17	18	18	17	18	17	16·4	12·2	14 31	29	1 2	5	13
22	24	23	15	9	10	9	11	11	17·8	**13.4**	9 49	34	20 35	4	14
14	12	14	15	16	13	15	16	17	15·3	10.0	23 38	35	0 34	5	15
15	17	18	16	17	15	16	17	18	16·4	9·3	11 22	41	13 6	5	16
23	23	23	22	22	20	20	20	23	**21·4**	11·8	5 25	**42**	3 25	6	17
17	18	17	16	15	16	16	16	17	18·4	11·2	7 57	34	7 35	10	18
12	10	10	11	10	11	11	9	12	11·7	5·9	1 32	19	4 45	6	19
10	12	9	9	9	10	11	10	12	9·8	5·1	1 6	18	8 47	4	20
14	14	14	13	12	11	10	10	11	12·3	8·2	13 28	23	12 55	5	21
14	14	13	12	11	11	10	10	10	11·9	7·5	13 50	21	4 10	6	22
11	11	11	11	9	10	10	11	11	10·8	7·4	5 42	17	23 13	5	23
12	11	11	11	8	7	5	6	7	10·2	5·6	16 35	22	21 59	3	24
9	7	7	7	7	6	5	4	4	7·3	**3·8**	5 12	17	10 6	2	25
9	9	9	9	9	9	8	7	7	7·2	4·5	15 53	13	4 35	3	26
14	15	15	14	14	12	13	11	9	9.7	6·4	17 52	20	11 8	2	27
17	18	18	17	17	15	12	11	11	12·4	8·5	17 17	24	7 0	3	28
13	11	10	9	9	19	14	9	12	9·0	6·3	21 28	25	7 24	1	29
12	12	12	10	4	8	5	6	14	9·2	6·1	1 22	29	2 15	3	30
14·6	14·4	13·6	11·8	10·8	10·9	10·0	10·4	10·8	11·4	7·4					Mean.

OCTOBER.

12	13	14	14	14	9	9	10	9	8·6	5·1	18 10	23	6 25	2	1
11	15	12	11	12	10	9	7	8	10·3	6·5	16 54	29	10 45	3	2
12	11	16	8	8	6	6	7	8	8·1	5·0	17 25	37	10 56	2	3
10	10	11	11	13	11	10	11	10	8·4	5·1	19 14	18	6 15	2	4
12	10	22	9	13	15	13	9	4	10·0	6·8	17 15	**41**	8 27	2	5
16	16	17	8	5	6	11	11	9	8·7	5·7	17 12	33	18 0	3	6
11	10	7	6	7	5	8	9	9	6·9	4·0	15 52	15	11 18	3	7
12	11	10	11	11	9	4	13	14	8·2	5·1	20 54	32	10 30	2	8
13	10	9	8	7	5	6	10	11	7·9	4·9	14 35	18	10 20	3	9
9	9	15	12	7	5	7	8	8	7.7	4·7	17 30	37	9 7	2	10
12	12	13	12	11	11	8	6	5	9·4	6·0	5 22	18	10 4	4	11
13	14	15	15	14	13	9	6	7	8·7	5·5	17 20	21	10 58	2	12
14	15	15	14	11	9	6	6	6	9·1	6·0	16 27	21	23 29	3	13
7	6	8	5	4	10	12	**27**	26	9·7	6·7	22 25	36	10 30	1	14
10	12	9	11	6	8	15	17	11	10·1	6·6	16 50	33	20 0	3	15
12	11	12	13	12	8	7	6	6	7·7	5·3	18 42	20	10 7	4	16
13	15	14	12	12	10	7	6	8	8·3	5·6	17 10	21	7 22	3	17
15	16	15	16	14	13	9	7	5	8·7	6·0	18 34	24	9 27	3	18
9	8	6	6	7	7	**6**	7	8	**6·0**	**3·1**	11 55	15	4 57	2	19
24	25	20	21	18	18	16	17	14	**13.1**	**8·7**	15 9	33	8 1	3	20
8	9	8	8	11	12	12	13	14	11·4	8·5	8 0	26	9 54	4	21
7	8	7	7	6	7	13	9	5	8·4	5·3	6 1	17	9 14	3	22
16	16	16	17	15	13	10	10	9	10·8	7·0	14 20	23	0 0	**0**	23
13	12	12	12	13	12	11	8	7	9·6	6·0	14 40	18	7 55	3	24
12	12	12	13	12	10	7	6	5	7·6	4·5	16 25	17	7 25	3	25
10	11	11	12	12	9	7	5	5	7·5	4·4	18 45	15	7 33	4	26
8	8	9	9	9	7	6	6	5	6·9	4·2	9 40	12	8 8	3	27
12	12	11	12	13	11	6	5	6	7·8	4·9	15 40	17	8 15	2	28
12	13	13	13	12	9	10	7	5	10·0	6·8	18 55	18	0 40	4	29
10	12	12	12	14	10	9	11	9	10·7	7·1	19 45	19	2 2	4	30
11	12	13	13	11	9	8	7	4	9·3	6·2	18 8	18	23 44	3	31
11·8	12·1	12·4	11·3	10·8	9·6	8·9	9 3	8·4	8·9	5·7					Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Date.	Hours. (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	7	7	7	8	9	9	8	9	11	9	8	7	7	9	9
2	4	7	8	10	9	9	9	6	7	7	6	5	6	9	10
3	5	6	7	8	6	7	7	7	6	5	5	4	7	10	11
4	7	6	7	8	8	7	6	8	8	7	7	6	6	8	10
5	5	5	8	7	8	8	7	7	6	6	6	7	6	7	10
6	7	8	11	12	13	13	15	14	10	9	7	7	7	7	10
7	7	7	10	11	10	13	14	12	11	8	6	7	7	6	10
8	7	7	9	10	11	13	13	12	11	12	9	9	7	7	10
9	7	7	9	9	10	11	11	10	11	10	7	7	7	5	8
10	5	7	7	9	11	12	13	12	12	11	7	6	5	5	8
11	3	4	4	5	5	5	7	6	7	6	5	5	7	8	11
12	7	6	4	3	5	7	5	4	4	3	7	7	9	11	11
13	8	6	3	4	5	6	5	6	6	5	4	7	7	9	11
14	10	8	4	6	13	11	8	6	3	5	5	7	9	10	11
15	4	3	3	3	4	5	4	4	8	8	6	8	9	11	13
16	6	5	4	5	8	7	9	12	11	11	7	5	7	7	8
17	7	8	9	9	10	12	14	14	14	10	9	7	7	7	7
18	5	6	7	7	7	12	12	11	10	9	9	8	7	9	13
19	21	23	17	19	19	21	20	19	19	15	11	7	14	17	16
20	13	12	13	13	10	11	8	8	8	5	12	9	8	9	9
21	8	7	7	6	7	7	6	8	9	6	4	6	7	7	8
22	5	4	7	8	8	9	10	9	9	7	5	6	7	9	10
23	5	5	6	6	6	5	5	6	8	6	10	11	12	12	13
24	4	4	5	4	6	6	7	8	7	5	4	4	6	7	8
25	5	4	4	5	4	5	6	5	6	7	5	5	8	12	14
26	5	5	5	7	8	6	6	6	6	6	12	14	14	14	14
27	5	6	12	13	10	6	7	9	9	6	4	3	7	9	10
28	6	9	10	13	13	11	11	12	10	10	17	13	7	7	7
29	4	4	6	7	6	7	8	10	12	7	3	5	7	12	14
30	8	11	12	13	12	13	12	13	12	11	9	7	8	8	9
Mean . .	6·7	6·9	7·5	8·3	8·7	9·1	9·1	9·1	9·0	7·7	7·2	7·0	7·7	8·9	10·4

DECEMBER.

1	10	11	9	10	9	9	9	8	4	5	5	4	5	7	11
2	9	11	9	10	9	9	9	7	6	7	5	4	5	8	10
3	5	6	8	8	7	7	10	11	10	9	7	5	5	7	8
4	6	6	6	7	7	8	9	9	9	8	8	7	7	7	7
5	5	5	6	7	7	7	8	8	8	7	5	5	6	8	9
6	4	6	6	5	6	7	8	10	10	8	7	5	7	9	12
7	7	7	6	9	8	10	13	10	10	9	5	5	9	7	7
8	4	5	6	6	9	12	13	13	13	11	10	6	5	5	9
9	6	7	10	11	12	10	10	11	11	9	5	5	5	6	9
10	4	4	4	6	6	12	12	10	10	9	7	5	7	7	10
11	7	8	8	9	9	9	10	10	9	7	6	6	10	11	12
12	6	7	7	7	8	8	8	7	10	11	12	11	8	13	15
13	11	7	9	9	10	10	11	14	15	15	13	11	9	8	7
14	8	12	14	13	13	14	13	14	13	12	13	14	11	9	8
15	9	9	11	12	12	13	14	16	15	15	13	10	8	7	7
16	5	6	10	9	9	10	9	10	8	7	9	9	8	7	9
17	7	8	13	12	11	9	10	9	9	9	5	6	8	10	12
18	7	8	11	11	8	8	7	6	5	6	5	5	7	10	9
19	9	8	9	10	11	12	12	9	7	9	11	9	8	9	13
20	12	13	16	13	14	14	16	17	14	7	11	12	11	10	12
21	6	5	6	6	7	6	5	5	6	9	7	8	10	14	15
22	6	6	6	6	7	9	7	5	5	7	7	6	7	9	9
23	8	8	7	9	8	7	7	6	5	6	7	12	13	13	13
24	7	7	7	9	8	7	7	6	6	6	6	8	11	11	13
25	5	5	7	7	8	8	9	10	8	8	6	5	8	11	11
26	3	5	5	6	5	6	7	9	8	7	7	6	9	10	12
27	4	6	6	8	9	9	6	7	7	7	5	5	6	8	9
28	4	4	4	5	5	6	6	5	7	7	6	6	5	7	10
29	5	4	6	6	7	6	7	6	6	8	9	13	14	15	15
30	11	9	10	11	8	7	7	6	6	7	10	12	14	13	13
31	7	7	7	7	6	7	6	5	7	8	5	5	5	6	7
Mean . .	6·7	7·1	8·0	8·5	8·5	8·9	9·2	8·8	8·6	8·4	7·6	7·4	8·1	9·1	10·4

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Hours (B. M. T.)									Mean.	Mean by Backley's.	Maximum.			Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.		Mag.	Time.	Mag.	
											H. M.			H. M.		
10	9	11	12	12	10	7	7	6	8·7	5·7	19 40		15	7 15	4	1
11	11	9	12	11	8	6	5	6	8·0	5·3	18 15		17	7 5	3	2
13	12	11	10	9	9	7	7	7	7·7	4·9	15 45		17	9 12	3	3
12	12	13	12	12	10	7	7	5	8·3	5·1	17 38		18	12 20	4	4
10	9	10	11	12	11	9	6	6	7·8	4·6	19 15		15	8 40	3	5
12	12	12	12	11	10	10	6	6	10·0	6·6	6 23		18	12 28	4	6
12	11	13	13	10	10	8	7	6	9·5	6·3	6 18		17	11 18	4	7
10	10	11	11	11	12	11	9	7	10·0	6·5	5 20		17	13 42	5	8
9	9	10	10	10	8	5	7	7	8·5	5·4	18 20		14	13 1	3	9
9	9	9	8	9	8	5	5	5	8·2	5·2	6 52		16	23 58	3	10
11	10	9	10	6	3	3	3	4	**6·1**	**3·8**	16 5		13	22 1	3	11
11	10	9	7	6	4	3	**2**	6	6·3	4·0	14 10		16	10 8	**0**	12
11	11	8	8	6	7	4	4	4	6·5	4·2	14 22		14	2 20	3	13
12	13	12	10	8	9	9	5	4	8·2	5·6	16 50		18	10 26	1	14
15	15	13	12	11	8	7	5	3	7·6	4·8	15 55		23	7 25	3	15
8	9	8	7	5	5	4	4	4	6·9	4·3	7 43		15	3 22	3	16
9	12	14	14	15	14	11	5	5	10·1	7·2	19 16		22	22 4	4	17
15	16	14	15	13	10	6	7	11	10·0	6·7	18 15		22	9 40	4	18
18	17	15	13	10	9	11	11	13	**15·6**	**12·3**	0 55		27	11 42	5	19
9	10	9	5	3	3	3	3	6	8·3	5·5	3 10		16	22 7	2	20
8	6	6	7	5	4	4	4	4	6·3	4·0	8 40		10	21 56	2	21
10	12	11	11	10	10	9	7	6	8·3	5·8	16 12		15	2 2	3	22
12	13	14	14	11	9	9	9	8	8·9	6·5	17 5		18	9 12	1	23
9	9	8	8	9	5	7	5	5	6·3	4·0	15 45		12	1 40	3	24
14	15	13	13	13	12	9	7	5	8·2	5·7	14 50		20	8 35	2	25
14	14	12	10	9	7	6	5	5	8·7	5·7	15 28		20	8 42	2	26
12	13	15	14	14	10	6	6	6	8·8	5·8	3 38		20	1 13	3	27
10	15	14	13	13	13	10	5	3	10·5	7·5	10 42		20	23 15	2	28
15	16	16	15	12	8	7	7	6	8·9	6·2	15 27		22	0 12	2	29
11	13	15	14	11	10	6	7	9	10·6	7·2	17 16		21	11 28	4	30
11·4	**11·8**	11·5	11·0	9·9	8·5	7·0	**5·9**	5·9	8·6	5·7						Mean.

DECEMBER.

13	16	16	14	9	6	7	3	6	8·4	5·8	17 20		23	7 15	**0**	1
11	11	11	13	12	7	7	5	5	8·3	5·7	18 50		17	8 20	4	2
9	9	8	7	5	5	4	4	5	7·0	4·3	7 15		14	22 5	2	3
10	9	12	14	13	11	7	5	5	8·2	5·5	18 52		17	22 50	4	4
8	7	8	8	7	8	7	6	6	6·9	4·4	6 28		11	4 15	4	5
15	16	15	14	13	12	7	4	7	8·9	5·8	16 48		21	0 18	3	6
9	11	13	13	11	10	6	6	4	8·5	5·7	19 15		19	2 28	4	7
10	10	13	12	13	11	8	6	5	9·0	5·9	17 10		17	0 4	4	8
10	10	9	11	11	8	6	5	5	8·4	5·6	18 27		15	12 45	4	9
11	11	10	11	8	6	5	6	7	7·8	5·0	6 7		16	6 50	3	10
12	11	12	13	11	10	8	6	7	9·2	6·3	17 53		18	11 43	4	11
17	17	16	14	16	15	12	10	10	11·0	7·5	15 22		23	12 14	3	12
11	11	15	16	14	13	12	6	5	10·9	7·5	18 13		23	1 27	5	13
10	14	17	15	14	15	13	8	7	**12·3**	8·5	17 20		25	22 50	4	14
10	12	14	13	13	12	12	7	5	11·2	8·2	16 55		19	14 22	4	15
11	11	11	11	9	11	11	10	7	9·0	6·1	7 3		15	7 52	4	16
16	16	15	15	15	13	9	7	7	10·5	7·0	16 10		23	10 59	4	17
9	8	7	9	8	6	6	**18**	17	8·4	5·8	22 37		**27**	9 1	3	18
12	7	7	7	9	10	11	10	8	9·5	7·0	14 42		20	0 54	4	19
14	11	12	10	10	8	9	8	7	11·7	**8·7**	4 55		22	9 13	3	20
15	15	16	15	16	15	12	10	8	9·9	6·6	19 47		26	8 37	2	21
13	13	16	16	15	14	9	11	11	9·2	6·3	17 45		23	8 6	3	22
13	14	16	16	14	11	7	9	8	9·9	6·5	18 50		21	10 10	2	23
13	14	14	13	12	11	10	11	8	9·4	6·2	17 1		19	10 1	2	24
13	14	14	14	14	9	6	4	3	8·6	5·6	19 35		19	20 57	3	25
12	13	12	13	12	9	7	6	5	8·1	5·5	18 50		19	11 10	3	26
11	11	11	12	11	8	6	4	4	7·5	5·0	19 10		16	0 0	4	27
11	12	13	11	11	10	8	5	6	7·3	4·8	16 16		16	2 24	3	28
16	16	17	16	14	13	10	7	10	10.3	7·1	18 35		22	8 45	3	29
16	18	17	16	14	11	9	9	6	10·8	7·4	17 7		24	9 20	3	30
9	9	9	7	6	6	7	6	6	**6·7**	**4·0**	16 45		11	7 55	3	31
11·9	12·2	**12·8**	12·5	11·6	10·1	8·3	7·2	6·8	9·1	6·2						Mean.

DIRECTION OF WIND, 1933.

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

Date.	Hours (B.M.T.).											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	SE	SE	NE	ESE	ESE	ESE	ESE	SE	E	E	E	NNW
2	N	N	N	NE	NE	ENE	E	ENE	ENE	E	E	ESE
3	NNE	NE	ENE	NE	ENE	NE	ENE	NNE	E	E	E	NW
4	ENE	NE	N	NNE	NE	NE	NNE	NNE	NE	NE	ENE	NNW
5	NNE	NE	NE	NE	NE	NNE	NE	NE	NE	ENE	ENE	ENE
6	NE	NE	E	E	E	ENE	E	ENE	ENE	ENE	NNW	NNW
7	N	NE	NE	NE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE
8	SE	SE	SE	SE	SE	ESE	ENE	ESE	ESE	SE	SE	SE
9	ENE	ENE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE	ENE	ENE
10	NNE	ENE	ENE	E	NE	E	E	E	E	ENE	ESE	E
11	SE	ESE	ESE	SE	ESE	ESE	ENE	ENE	ENE	ENE	ENE	ENE
12	ENE	NE	ENE	E	ESE	ENE	ENE	E	ESE	ENE	ENE	ENE
13	NE	E	ENE	ENE	ENE	E	E	ESE	E	ENE	E	ESE
14	ESE	ESE	ENE	ENE	NNE	NE	ENE	E	ENE	ESE	SE	SE
15	ESE	NE	NE	ENE	ENE	ESE	ESE	SE	ESE	SE	ESE	SW
16	E	ESE	ENE	ENE	NE	ENE	E	E	ENE	E	E	SE
17	SE	ENE	ENE	ENE	E	E	E	ENE	ENE	E	E	E
18	SE	SE	SE	SE	SE	NE	NE	NE	ENE	SE	SE	SSE
19	SE	SE	NE	NNE	NE	NNE	NE	E	ENE	E	E	NW
20	N	ENE	ENE	NE	NE	NNE	NE	ENE	E	E	NNW	NNW
21	NE	ENE	N	NNE	NE	NE	NE	NE	ENE	ENE	ENE	NNW
22	N	N	N	NNE	NNE	NE	ESE	ESE	N	NNW	NNW	NNW
23	NNE	NNE	NE	NNE	NE	NE	NNE	NE	NE	NE	NNW	NNW
24	NNE	NNE	NE	NE	NE	ENE	E	E	ENE	ENE	ENE	ENE
25	NE	NE	NE	NE	NE	NE	NE	NE	NE	NNE	NE	NNE
26	NNE	NE	NE	E	E	E	ENE	ENE	ENE	ENE	E	ESE
27	ENE	ESE	E	NE	NE	SE	SE	ESE	ESE	E	E	NW
28	SE	SE	NE	NE	NE	ENE	ENE	E	ENE	ENE	ENE	E
29	N	N	N	N	NE	NE	ENE	NE	ENE	ENE	ENE	NW
30	NNW	N	N	ENE	NE	NNE	NNE	NE	ENE	ENE	E	NW
31	N	NNW	N	N	NNE	NNE	NNE	NE	NNE	ESE	ENE	NNW
Mean.	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NNE

FEBRUARY.

1	NNE	NNE	N	N	N	NNE	NNE	NE	NNE	SE	NNW	NNW
2	N	N	N	NNE	NNE	NE	NE	NNE	NNE	ENE	N	NNW
3	NE	NE	NNE	NE	NNE	NE	NE	NE	ENE	ENE	ENE	NNW
4	NNE	NE	ENE	NE	NE	NE	ENE	ENE	ENE	ENE	NNW	NNW
5	NNE	NNW	N	NE	NNE	NNE	NE	NE	ENE	ENE	ENE	NNW
6	N	N	NNE	NNE	NNE	NNE	NE	NE	NNE	NNE	NNW	NNW
7	NE	NNE	NNE	N	NNE	NNE	NE	ENE	ENE	N	NNW	NNW
8	NNE	N	NNE	NE	NE	NE	NNE	NNE	NNE	NNE	NNW	NNW
9	NE	ESE	N	N	N	NNE	NNE	NE	E	E	SE	NW
10	SSE	NNW	ESE	ESE	ESE	NE	NE	NE	ESE	SE	SSW	W
11	N	N	N	NE	NE	NE	ENE	ENE	ENE	E	NW	NW
12	N	NNW	N	N	NE	ENE	ENE	ENE	ENE	ESE	NNW	NNW
13	NNE	NE	NE	NNE	NNE	NNE	NNE	NE	NNE	ENE	E	NNW
14	N	NNE	NNE	NE	NE	NE	NE	NE	NNE	E	NNW	NNW
15	NNE	NNE	NE	NE	NE	NE	NE	NE	E	E	NNW	NNW
16	NNW	NNW	N	NE	NE	ENE	E	SE	SE	SE	SSE	W
17	NNW	NNW	NNW	NE	NE	SE	E	ENE	ENE	ENE	E	NW
18	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	ENE	ENE	SE	NNW
19	ENE	NNE	NE	SE	SE	ESE	SE	SE	SE	SE	SE	SSW
20	NNW	NE	NE	ESE	NE	ENE	E	SE	SE	SE	SE	WNW
21	N	N	ENE	ESE	SE	ENE	ENE	ESE	ENE	E	ESE	NNW
22	NE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSW	SW
23	S	SE	NW	NNW	S	SE	SE	SE	SSE	SSE	SW	SW
24	WNW	SE	SE	SE	SE	SSE	SE	NE	ENE	E	ESE	SE
25	SW	WSW	SE	SE	SE	SE	SE	SE	SE	ESE	SE	SW
26	NE	NE	NE	ENE	NE	NE	NE	NE	ENE	NE	NNW	NNW
27	NNE	NNE	NNE	NNE	NNE	NE	NNE	NNE	NNE	NNW	NNW	NNW
28	NE	ESE	N	ESE	ESE	E	ENE	ESE	SE	SE	SE	SSW
Mean.	NNE	NNE	NNE	NE	NE	ENE	ENE	ENE	ENE	E	NNE	NW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY.

Hours (B. M. T.)												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	NNE	NNE	NNE	1
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	ENE	ESE	N	2
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NE	NE	NNE	3
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	N	N	N	4
E	NW	NW	NNW	NNW	NNW	N	NNE	NNE	NNE	NNE	NNE	NNE	5
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	ENE	N	NNE	6
ENE	NW	NW	NNW	NNW	NNW	NNW	N	N	NE	E	SE	NNE	7
SE	WNW	WNW	NW	NW	NNW	NNW	N	NNE	NNE	NNE	ENE	ENE	8
E	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	9
E	NW	NW	NNW	NNW	NNW	N	N	N	NNE	NE	E	NE	10
ENE	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	ENE	NE	NNE	NE	11
ENE	NNW	NNW	NNW	NNW	N	N	N	NNE	ENE	NNE	NNE	NE	12
ESE	NW	NW	NNW	NNW	NNW	NNW	NNW	NNE	NNE	ENE	E	NE	13
NW	NNW	NW	NNW	NNW	N	N	N	N	N	NNE	NNE	NNE	14
SW	W	W	W	W	W	NW	NNW	NNW	NNE	ENE	ENE	ENE	15
NW	NNW	NW	NW	NW	NNW	NNW	NNE	NNE	ESE	SE	SE	NE	16
ESE	SE	NW	NNW	NNW	N	N	N	NNE	NNE	ESE	SE	NE	17
SW	SW	SW	NW	NW	NW	NNW	N	N	N	NE	NE	NNE	18
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	19
NNW	NNW	NNW	NW	NNW	NNW	N	N	N	NNE	NNE	NE	N	20
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	N	N	21
NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	NNE	N	22
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	NNE	N	23
NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NE	NE	NNE	24
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	N	25
NW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNE	26
NW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	N	N	27
NW	NW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	N	NNE	28
NW	NW	NW	NW	NNW	NNW	N	N	N	NNE	NNE	NNE	N	29
NW	NNW	NNW	NNW	N	NNW	NNW	NNW	N	N	NNE	NNE	N	30
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	31
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NE	NNE	Mean.

FEBRUARY.

NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	1
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NE	N	2
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	N	3
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NE	NNE	N	4
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	5
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	6
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	N	7
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	N	8
NW	NNW	NNW	NNW	N	N	N	NNW	NNW	NNE	N	N	N	9
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NNW	NNW	10
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	11
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	N	12
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	13
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	14
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	15
WNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NNW	NNW	16
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NE	NNE	N	17
NNW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	ENE	N	18
W	W	WNW	WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	19
WNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	20
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NE	NNE	NNE	N	21
W	W	W	W	W	W	W	W	WNW	WNW	WNW	WSW	WSW	22
SW	SW	W	W	WSW	WSW	SW	W	W	WNW	WNW	WNW	SW	23
NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	W	SW	WSW	NNE	24
W	WNW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	NE	SSE	25
NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NE	NNE	N	26
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	NNE	NNE	NE	N	27
W	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NE	NE	NE	N	28
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	Mean.

DIRECTION OF WIND, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Date.	Hours (B.M.T.)											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	N	N	N	ESE	NNE	NNE	NNE	NNE	ESE	ESE	ENE	NW
2	NNW	NNW	NNW	NNE	NE	NE	ENE	E	ESE	E	NNW	NW
3	N	NNW	NNW	N	N	NE	NE	E	E	E	SE	NNW
4	NE	NE	NNE	NE	NE	NE	NE	ENE	NNE	N	NNW	NNW
5	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	E	ENE	E	NNW
6	N	NNE	NNW	N	NNE	NE	NNE	NE	SE	ESE	ESE	NW
7	WSW	NW	NW	NNW	N	N	N	NE	SSE	SSE	NW	NW
8	NW	NW	NNW	N	NE	E	SSE	SSE	SSE	SSE	W	NW
9	N	N	N	N	NNE	NNE	NNE	ENE	E	E	NNW	NNW
10	NNE	NNE	N	NNE	NNE	NNE	NNE	ENE	ENE	ENE	NW	NNW
11	NE	NE	NNE	NE	NE	NNE	NNE	NE	NNW	NNW	NW	NW
12	NNE	NNE	N	N	NNE	NE	SE	SE	ESE	ESE	W	NW
13	NNW	NNW	NNW	NNW	NNE	SE	SE	SE	SE	S	SW	W
14	SW	NW	NW	NNW	NE	ENE	ESE	NE	ENE	ENE	ENE	NW
15	NNE	NNE	NNE	N	N	NE	ENE	NE	ENE	ENE	NE	NE
16	SE	SSE	ENE	N	N	NE	SE	SE	SE	SE	W	W
17	SE	SW	W	W	SW	SE	SE	SE	SE	SW	W	WNW
18	NW	NW	NNW	NNW	N	N	ESE	SE	SE	SSE	NNW	NNW
19	N	NNE	NNE	NE	NE	ENE	NE	NE	N	NNW	NNW	NNW
20	N	N	NNE	NNE	NE	NNE	NE	NE	NNE	NNW	NNW	NNW
21	NNW	NNW	NNW	NNE	NE	NE	NE	NNE	NNE	ESE	NW	NW
22	NNW	N	N	NE	NE	NE	NE	NE	NNE	ENE	NW	NW
23	NNW	NNW	N	N	NE	NE	NE	NE	ENE	NNW	NNW	NNW
24	NW	WNW	WNW	NW	NNW	NNW	NNW	N	N	N	NNW	NNW
25	NNW	NNW	NNW	N	NNE	NE	NE	NE	E	NNW	NNW	NNW
26	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	NNE	N	SE	NW
27	WNW	NW	NW	NNW	NNW	N	NE	SE	SE	SSE	SW	WSW
28	W	WNW	WNW	WNW	SE	SE	SE	SE	SE	NW	NW	NNW
29	NNW	NNW	N	ENE	ENE	E	ENE	ENE	ENE	N	NNW	NNW
30	NNW	N	N	N	N	NNE	NNE	NNE	N	N	NNW	NNW
31	N	N	NNE	NNE	NE	NNE	NNE	SE	SSE	S	NW	NW
Mean.	NNW	N	N	N	NNE	NE	NE	NNE	E	NE	NNW	NW

APRIL.

1	WSW	SW	SW	SW	SSW	WSW	SSE	S	SSW	SW	WNW	WNW
2	N	NNW	N	NNE	NNE	NE	ESE	ESE	ESE	SE	NW	NW
3	NNE	NE	NNE	NNE	NE	NE	NE	NNE	N	N	N	NNW
4	N	N	NNE	NNE	N	N	NNE	NNE	N	N	N	NNW
5	N	N	NNW	N	NNE	NNE	NNE	NNE	N	N	NNW	NNW
6	N	N	N	N	NE	ENE	ENE	Calm	NW	NW	NW	NNW
7	NNW	NNW	NNW	N	NNE	NNE	NE	NNE	NNW	NNW	NNW	NNW
8	NNW	NNW	NNW	NE	NNE	NNE	NNE	NNE	NNW	NNW	NNW	NNW
9	N	N	N	N	N	NNE	NNE	NNE	NNE	NNE	NNW	NNW
10	ESE	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
11	SW	SW	SW	WNW	WSW	WSW	W	W	WSW	SW	W	WNW
12	SW	SW	SW	SW	WNW	WNW	WNW	W	WSW	WSW	W	WSW
13	WSW	W	W	W	W	W	W	WSW	W	W	W	WSW
14	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW
15	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	W	W	W
16	WNW	NW	NW	NNW	NNW	NNW	N	NNW	SSE	NNW	NW	NW
17	NNW	N	NNE	NNE	NNE	NNE	NNE	NNE	ENE	NNW	NNW	NNW
18	N	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNW	NNW	NNW
19	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW
20	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	WNW
21	NW	W	SW	SW	SW	SW	WNW	WNW	NW	NW	NW	NW
22	NNW	NNW	NNW	N	NNE	NNE	NNE	NNW	WNW	WNW	NW	NW
23	NNW	NNW	NNW	NNW	N	NE	NE	E	ESE	ESE	NW	WNW
24	NNW	NNW	NNW	NNW	NE	NNE	NE	ENE	ENE	NW	NW	NW
25	NNW	NNW	NNW	NNW	NE	NE	NE	E	E	NW	NW	NW
26	NW	NW	NW	NW	N	N	NW	NNW	NW	WNW	WNW	NW
27	WNW	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NW	NW	NW
28	NW	NW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NW	NW
29	NW	NNW	NNW	NNW	NNW	NE	NE	NNE	SE	SSW	NW	NW
30	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW
Mean.	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	WNW	NW	NW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Hours. (B. M. T.)												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	1
NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	N	NNW	2
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	NE	NNW	3
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	ENE	NE	NNE	N	4
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	N	5
NW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	SSW	SE	SE	N	6
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	WNW	NW	7
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	8
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	9
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NE	N	10
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	NE	NNE	NNE	N	11
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNE	NNE	NNW	NNW	NNW	12
NW	NW	NW	NW	NW	NW	WSW	SSW	SW	SSW	SW	SW	W	13
NW	NW	NW	NNW	NNW	NNW	N	NW	N	NW	N	NNW	NNW	14
NNW	NNW	WSW	WNW	NW	NW	NNW	NNW	SE	SSW	SSW	SSW	N	15
W	W	WNW	WNW	NW	NW	NW	NW	NE	SE	SSE	SSE	WSW	16
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	NNW	WNW	WNW	17
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW	18
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	19
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	20
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	21
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	22
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NNW	23
NNW	NNW	NNW	NNW	NW	NW	NNW	NNW	NNW	NNW	NW	NNW	NNW	24
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	25
NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WSW	WSW	NNW	26
W	W	W	W	WSW	WSW	WSW	W	WNW	WNW	WNW	WNW	W	27
NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	28
NW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	N	NNW	N	29
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	N	N	30
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WSW	NNW	31
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	Mean.

APRIL.

NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	WNW	1
NW	NW	NW	NW	NW	NW	NNW	NNW	N	NNW	NNW	N	NNW	2
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	N	3
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	N	N	N	4
NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	N	NNW	5
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	6
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	7
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	8
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	N	SE	S	N	9
SW	WSW	WSW	SW	W	W	W	W	W	W	W	SW	SW	10
WNW	WNW	WNW	W	W	WSW	WSW	SW	SW	SW	SW	SW	WSW	11
WNW	NW	WNW	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	12
WSW	WSW	W	W	W	W	W	WNW	W	WNW	W	W	W	13
W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	14
W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	15
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	16
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	N	N	N	17
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WSW	NNW	18
WSW	W	WNW	WNW	WNW	WNW	WNW	SW	SW	WSW	SW	SW	WSW	19
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	W	20
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	21
NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	22
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	23
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	24
NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NNW	25
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	26
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	27
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	28
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	29
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NW	30
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	Mean

DIRECTION OF WIND, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Date.	Hours (B. M. T.).											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNW	N	NNW	NNW	N	NE	NNE	NW	NW	NW	NW	WNW
2	NNW	NNW	NNW	N	NE	NE	NNE	ENE	E	NW	NW	NNW
3	NNW	NNW	NNW	NNW	NE	NE	NNE	N	N	NNW	NW	NW
4	NNW	NNW	NNW	NNW	NW	SW	SW	SW	SW	SW	SW	W
5	NW	NW	NW	NW	NW	NW	NW	SW	SW	W	WNW	WNW
6	NNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW
7	NNW	NNW	NNW	NW	NNW	N	N	SSE	WNW	WNW	WNW	NW
8	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW
9	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW
10	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW
11	NW	WNW	NW	NW	N	N	N	NNW	NNW	NW	WNW	NW
12	WNW	NW	NE	NW	W	W	WSW	SW	SW	SW	SW	WSW
13	NW	NW	NW	NW	NW	Calm	NNW	NW	NW	SE	NW	NW
14	NW	NW	WNW	NW	NNW	N	NNE	NNE	E	E	NNW	NW
15	SE	NNE	NE	SE	SE	E	ESE	ESE	ESE	SE	SE	ESE
16	SSW	SSW	N	NNW	NW	SE	SE	SE	SE	W	WNW	WNW
17	ESE	SE	SE	SE	SE	SE	SE	SE	SE	S	SSW	SSW
18	SSE	S	SSW	SSW	SSW	SSW	SW	SW	W	W	WNW	WNW
19	WNW	WNW	WNW	WNW	WNW	WSW	SW	SW	SSW	SSW	SW	SW
20	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW
21	WSW	W	W	WSW	WSW	WSW	SW	SW	SW	SW	W	WNW
22	NW	NW	WNW	WNW	NW	NNW	NNW	NNW	NW	NW	NW	NW
23	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW
24	NW	NW	NW	NW	NNW	NNW	NW	NW	NNW	NW	NW	WNW
25	WNW	WNW	WNW	W	W	W	W	W	W	W	WSW	WSW
26	W	W	NW	NW	WNW	W	WNW	WNW	WNW	WNW	W	W
27	WSW	WSW	WSW	WSW	W	WNW	WNW	W	WNW	WNW	WNW	WNW
28	NW	NNW	NNW	N	NE	NE	NE	E	NNW	NNW	NW	NNW
29	WNW	WNW	NW	NNW	NE	ESE	ESE	NNE	N	NNW	NNW	NNW
30	NW	NNW	NNW	N	NE	SE	NW	NW	NNW	NNW	NW	NW
31	ESE	ESE	ESE	ESE	E	E	ENE	ENE	ENE	ESE	NW	NW
Mean.	WNW	NW	NW	WNW	NW	NW	NW	NW	NW	W	WNW	WNW

JUNE.

1	SW	SSW	SSW	S	SSE	SSE	W	WNW	SE	SW	SW	WSW
2	SSE	SE	SE	SSE	SW	SSW	SW	W	WSW	WSW	SW	SW
3	SW	SW	SSW	SW	SSW	SSW	S	S	SSW	SSW	SW	SW
4	SE	SSE	SSE	SE	SSE	SSE	SSE	SSE	SSW	SSW	SSW	SW
5	SW	W	W	WNW	WNW	W	WSW	W	W	W	W	W
6	WNW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
7	WSW	WSW	WSW	WSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SW
8	SSW	SSW	SSW	NNE	SSW	SSW	SSW	SSE	SE	SSE	SSW	SSW
9	WSW	WSW	WSW	SW	SSE	SSE	SSE	SSE	S	SSW	SW	W
10	WSW	NW	W	W	WNW	WNW	WNW	NW	NW	NW	WNW	WNW
11	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
12	WNW	NW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	WNW	WNW
13	W	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW
14	W	W	W	W	WSW	WSW	WSW	WSW	W	W	W	W
15	WSW	WSW	WSW	WSW	WSW	WNW	SSE	SE	SE	SSW	WSW	WNW
16	WSW	WSW	W	WNW	WSW	SSE	S	SSW	SSW	SSW	SW	W
17	SW	WSW	W	W	W	W	WSW	SW	SW	SW	SW	W
18	SW	SW	SW	SW	SW	SSE	SSE	SSE	SSE	SSW	SSW	S W
19	SW	SW	SW	SE	SE	SE	SE	SW	SSW	SSW	SSW	S W
20	SSE	SSE	S	S	S	S	S	SW	SSW	SSE	S	SSW
21	SW	WSW	WSW	SW	SSE	SSE	SSW	SW	SW	SW	SSW	SW
22	W	W	W	W	WSW	WSW	WNW	WSW	WSW	WSW	WSW	SW
23	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW
24	W	WSW	WSW	W	W	SW	SW	W	W	W	WSW	WSW
25	W	W	W	W	W	W	WSW	WNW	WNW	WNW	WNW	WNW
26	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W
27	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW
28	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW	NW	NW
29	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
30	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
Mean.	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Hours. (B. M. T.)												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
WNW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	1
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	2
NW	NW	N W	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	3
W	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	4
WNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	5
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	6
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	7
NW	NW	NW	NW	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	8
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NNW	NNW	9
NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NNW	NW	WNW	NNW	10
NW	NW	NW	NW	NW	NW	NW	NW	NW	W	W	WSW	NW	11
WSW	WNW	WNW	NW	NW	NW	NW	NNW	NNW	NW	NW	NNW	WNW	12
NW	NW	NW	NNW	NNW	NW	NW	NNW	NNW	NE	WNW	NW	NW	13
NW	NW	NW	WNW	WNW	WNW	NNW	NNW	NNW	NW	SW	SW	NW	14
NE	NNW	NW	NW	NW	NW	NW	NNW	SSW	SW	SW	SW	ESE	15
W	WNW	WNW	NW	NNW	E	E	ENE	ENE	ESE	ESE	ESE	N	16
SSW	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	17
W	W	W	W	W	W	W	W	W	WNW	WNW	WNW	WSW	18
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	19
WSW	W	W	W	W	WNW	WNW	W	WNW	W	WSW	WSW	SW	20
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	21
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	22
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	23
WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	NW	24
W	W	W	W	WSW	W	W	W	W	W	W	W	W	25
W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WSW	WSW	WNW	26
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	27
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	WSW	WSW	NW	28
NNW	NNW	NNW	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	NNW	29
NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NW	E-E	NW	30
NW	NW	WNW	WNW	W	WSW	SW	SSW	SW	SW	WSW	SW	WSW	31
WW	WNW	WNW	NW	NW	NW	WNW	NW	NW	WNW	WNW	W	WNW	Mean

JUNE.

WSW	WSW	WNW	SW	WSW	WSW	W	WSW	S	S	SSE	SSE	SSW	1
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	2
SW	SW	SW	SW	SW	SW	SW	WSW	SSW	SW	WSW	SW	SW	3
SW	WSW	WSW	W	WNW	WNW	WNW	W	WSW	SW	WSW	WSW	SW	4
W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	5
WSW	WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	6
SW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	SW	SSW	SW	7
SW	SW	WSW	W	W	W	WSW	WNW	WNW	WSW	WSW	WSW	SW	8
W	W	W	WNW	WNW	W	W	W	WSW	WSW	WSW	WSW	WSW	9
WNW	WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	10
NW	NW	NW	NW	NW	NW	WNW	NW	WNW	WNW	WNW	WNW	NW	11
WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	WNW	12
WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	W	W	13
W	W	W	WNW	WNW	W	W	W	WSW	SW	SW	WSW	W	14
WNW	WNW	WNW	WNW	WNW	W	W	W	WSW	WNW	W	WSW	W	15
SW	W	W	W	W	WSW	SW	SW	SW	SW	SW	SW	SW	16
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	17
SSW	SSW	SSW	SSW	SW	SW	SW	SW	SSW	SW	SW	SW	SSW	18
SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	SSE	SSE	SSE	SSW	19
SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SW	SW	SSW	20
SW	SW	WNW	WNW	WNW	NW	NW	NW	WNW	W	W	W	WSW	21
SW	SW	SW	W	W	W	W	WSW	W	WSW	WSW	WSW	WSW	22
W	W	WSW	WSW	W	W	WSW	W	W	WSW	WSW	WSW	WSW	23
WSW	WSW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	24
W	W	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	25
WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	W	WNW	WNW	WNW	26
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	27
WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	28
WNW	WNW	WNW	WNW	W	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	29
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	30
WSW	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	Mean.

DIRECTION OF WIND, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY.

Date.	Hours (B.M.T.)											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW
2	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
3	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW
4	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
5	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
6	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW
7	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
8	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW
9	W	WNW	WNW	WNW	W	W	W	W	W	W	WNW	WNW
10	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW
11	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW
12	WNW	WNW	WNW	WNW	NW	NNW	NW	NW	NW	WNW	NW	WNW
13	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	NNW	NNW	W
14	NW	SW	S	SSE	SSW	SSW	SW	SSW	SSW	NW	NW	WNW
15	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
16	WSW	WSW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WSW	WSW	W
17	W	W	WNW	WNW	W	W	W	WSW	WSW	WSW	WSW	W
18	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W
19	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW
20	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
21	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
22	W	W	W	WSW	WSW	W	W	W	W	W	WNW	W
23	W	W	W	WNW	WNW	W	WNW	WNW	WNW	W	W	W
24	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W
25	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	NW
26	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
27	W	W	WNW	WNW	WNW	NW	WNW	NW	WNW	WNW	WNW	WNW
28	W	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW
29	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW
30	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NNW	WNW
31	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	NW	NW
Mean.	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW

AUGUST.

1	W	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW
2	WNW	WNW	WNW	WNW	WNW	W	W	W	WSW	WNW	W	WNW
3	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
4	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	NW
5	NW	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW
6	W	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	W
7	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WNW	W
8	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
9	W	WNW	WNW	NW	WNW	WNW	WNW	NW	NW	NW	NW	NW
10	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
11	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W
12	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W
13	WNW	WSW	WSW	W	WSW	WSW	WSW	W	W	WNW	W	W
14	WNW	WNW	WNW	W	W	W	W	W	W	WSW	WNW	W
15	W	W	WNW	WNW	WNW	W	WSW	WSW	W	WSW	W	WSW
16	WSW	W	W	WSW	WSW	W	W	W	NW	NW	NW	WNW
17	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
18	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW
19	NNW	NNW	NNW	NNE	NNW	NNW	ENE	ESE	SSE	SSE	NNW	NNW
20	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
21	NW	NW	NW	NNW	NNW	NNW	NNW	E	ESE	ESE	S	NNW
22	N	N	NE	NE	NE	NE	NE	NNE	ENE	ESE	E	NW
23	N	NNE	E	SE	SW	W	SW	SSW	SSW	SSW	SW	SW
24	SSE	SSE	S	S	SSW	SSW	SSW	SSW	SW	SW	SW	WSW
25	NW	NW	NW	NW	WNW	NW	NW	NW	WNW	NW	NW	NW
26	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW
27	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	NW	WNW	W
28	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
29	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
30	NW	WSW	WNW	NW	SW	S	SSE	SSE	SSE	SSE	SW	SW
31	NW	NW	WNW	W	WSW	NW	WNW	W	SW	W	SW	W
Mean.	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW

(Averages for periods of sixty minutes from full hour to full hour of local mean time).

JULY.

Hours (B.M.T.).												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	1
NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	2
WNW	WNW	WNW	WNW	W	W	W	W	W	W	W	W	WNW	3
WNW	WNW	WNW	W	W	W	W	W	W	W	W	W	W	4
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	5
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	6
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	7
WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	8
WNW	W	W	W	WNW	WNW	WNW	W	W	W	WNW	WNW	W	9
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	10
NW	NW	NW	NW	NW	NW	WNW	NW	WNW	WNW	WNW	WNW	NW	11
WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW	WNW	12
W	W	WNW	WNW	NW	NW	NW	NW	W	SW	SW	WNW	WNW	13
NW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	NW	14
WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WSW	WSW	WNW	15
WSW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WNW	WNW	W	16
W	WNW	W	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	17
W	W	W	W	W	W	W	W	W	W	W	W	W	18
WSW	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	19
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	20
WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	WSW	21
W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	22
W	WNW	WNW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	23
WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	24
WNW	W	W	W	W	W	W	WNW	W	W	W	WNW	WNW	25
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WNW	26
WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	27
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	28
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	29
WNW	WNW	WNW	NW	WNW	WNW	WNW	NW	NW	WNW	NW	NW	WNW	30
NW	NW	NW	NW	NW	NW	NW	WNW	NW	NW	WNW	W	WNW	31
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	Mean.

AUGUST.

NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	1
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	2
WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	3
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	4
WNW	W	W	W	W	W	W	W	W	W	W	W	WNW	5
W	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	6
W	W	W	W	W	W	W	W	W	W	W	WSW	W	7
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WNW	8
NW	NNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	NW	9
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	10
W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	W	11
WNW	WNW	WSW	WNW	W	W	W	W	W	WSW	WSW	W	W	12
WNW	WNW	W	WNW	W	WNW	WNW	WNW	WNW	WNW	W	W	W	13
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WNW	14
W	W	W	WSW	W	W	WNW	W	W	W	W	W	W	15
W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	16
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	17
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	18
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	19
NW	NW	NNW	NNW	NW	NW	NW	NW	NNW	NNW	NNW	NW	NW	20
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	21
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NW	N	N	22
SW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	SW	SW	SSE	WSW	23
WNW	NW	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	WSW	24
NW	W	W	ESE	E	SE	SE	S	SW	NW	WNW	WNW	NW	25
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	26
W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	27
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	28
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	29
WNW	WNW	NW	NW	WNW	NW	NW	NW	WNW	NW	NW	NW	W	30
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	31
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Date.	Hours (B.M.T.)											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW
2	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
3	NW	NW	NW	NNW	NNW	SE	SE	SSE	SE	SSE	SSW	W
4	SSW	ENE	ENE	ENE	ENE	ENE	NE	NNE	ENE	N	NNW	NNW
5	ENE	N	N	N	NE	NE	NNE	NNE	NNE	NNW	NNW	NNW
6	NE	NE	NE	NE	NE	NNW	N	NE	ENE	NW	NNW	NNW
7	SE	SE	SE	ESE	ENE	E	E	N	N	NNE	NNW	SE
8	NNW	NNW	NNW	NNE	NE	NE	NE	ENE	ENE	ESE	ESE	SE
9	NW	NNW	NW	NW	SE	E	ESE	SE	E	ESE	SE	NNW
10	WSW	SW	SSW	SSW	SSE	SSE	SE	SW	S	S	SSE	SSW
11	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	SW
12	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	W
13	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
14	SSW	SSW	SSW	SSW	S	S	S	SSW	S	SSW	SW	SW
15	SW	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW
16	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW
17	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	WNW
18	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
19	WNW	NW	NW	NW	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW
20	W	W	W	W	W	WNW	W	WNW	WNW	NW	WNW	WNW
21	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW
22	NW	NW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	NW
23	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
24	WNW	WNW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW
25	WSW	SW	SW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
26	WNW	NW	W	W	SE	SE	SE	SE	SE	SE	SSE	SW
27	NE	NE	NE	NE	NE	ENE	ENE	ENE	E	ENE	E	NNW
28	NNE	NE	NE	NNE	NNE	NE	NE	NNE	NNE	N	NNW	NNW
29	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	ENE	ENE	SE	NNW
30	SE	SE	W	NW	NNW	ESE	SSE	E	SE	E	ESE	ENE
Mean.	W	W	W	W	W	W	WSW	W	WSW	W	W	W

OCTOBER.

1	SE	SE	SSE	SE	SE	SE	SE	ENE	ESE	SE	SSW	W
2	ESE	ESE	SE	SW	SW	SW	ESE	ESE	ENE	ENE	E	NW
3	ENE	ESE	SE	SE	ESE	NE	ENE	E	ENE	E	E	NW
4	SE	ENE	ENE	ESE	SE	NW	NW	NW	SE	E	ESE	E
5	NNW	N	NNE	NNE	NNE	NE	NE	NE	NE	ESE	NNW	NNW
6	SE	E	NE	NE	NE	NE	NE	ESE	E	E	ESE	E
7	ENE	NE	NE	NE	NNE	NE	NE	E	E	E	NW	NNW
8	SSW	SSW	SE	SE	SSE	SE	ESE	SE	SE	E	NNW	NNW
9	WNW	NW	SE	SSW	SSW	SSW	SE	SE	E	ENE	ESE	E
10	SW	S	SE	SE	SE	SE	SE	ENE	ENE	ENE	E	ESE
11	ENE	ENE	ENE	ENE	ENE	E	E	E	ESE	ESE	ESE	SE
12	NNE	NE	ENE	ENE	SE	SE	SE	ESE	ESE	SE	SE	SE
13	SE	ESE	SE	ESE	SE	SE	SE	SE	SE	SE	SE	SE
14	SSW	SSW	SW	SSW	SSW	SSW	SSW	SSW	SSW	S	W	WNW
15	SE	SE	ESE	SE	SE	ESE	ESE	E	ESE	E	ENE	ENE
16	WSW	SSE	SE	SE	SE	SE	SE	SE	ESE	SE	W	NW
17	ENE	E	ENE	ESE	S	S	SE	ESE	E	ESE	SE	SW
18	NE	E	ESE	SE	SE	ESE	ESE	ESE	E	E	ESE	WSW
19	N	N	NNE	NNE	NNE	SE	SE	SE	S	SW	SW	SW
20	WSW	WSW	WSW	WSW	SW	SW	W	N	ENE	NE	SW	WSW
21	SSW	S	S	S	SSE	SE	SE	SE	SE	ENE	NNW	NW
22	SSW	SSW	SSW	SSE	SSE	SE	SE	NW	W	SE	SE	SSE
23	Calm	SE	ENE	ESE	ESE	E	E	ENE	ENE	ENE	NNW	NNW
24	NNE	NNE	NNE	NNE	NE	NE	NE	NE	ENE	ENE	ESE	NNW
25	NNE	NE	NE	NE	NE	NE	ENE	ENE	E	ENE	ESE	SE
26	NE	NE	NE	NE	NE	NE	E	E	E	E	E	ESE
27	NE	NE	ENE	NE	NE	ENE	NE	NE	ENE	ENE	E	ESE
28	ESE	ENE	ENE	E	ENE	NE	NNE	NNE	E	ESE	ESE	ESE
29	NE	ENE	E	E	ESE	E	ESE	SE	ESE	E	SE	SE
30	NE	NE	ENE	ENE	ENE	E	ESE	ESE	ESE	ESE	ENE	ENE
31	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
Mean.	ESE	ESE	E	ESE	ESE	ESE	ESE	E	E	E	E	NE

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Hours (B.M.T.)												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	1
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	2
WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	3
NW	NNW	NNW	NNW	NNW	NNW	N	N	NE	NE	NE	NE	N	4
NNW	NNW	NNW	N	N	NNW	N	NE	NE	NE	NE	ENE	N	5
NNW	NNW	NNW	NNW	NNW	NE	NNE	NE	NE	NE	SE	SE	N	6
NNW	NNW	NNW	NNW	NNW	NNE	ENE	ENE	E	E	SE	NNW	NE	7
W	WNW	WNW	NNW	NNW	NNE	NNE	N	N	WNW	WNW	NW	NNW	8
NW	N	NNW	N	N	NNE	N	NNW	NNW	NW	NW	WNW	N	9
SSW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	10
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	11
W	W	WNW	W	WNW	WNW	WNW	W	WSW	WSW	WSW	WSW	WSW	12
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SW	13
SW	SW	SW	SW	SW	SW	WSW	W	WSW	WSW	SW	WSW	SW	14
SW	WSW	WSW	W	W	WSW	SW	WSW	WSW	WSW	W	W	WSW	15
WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	16
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	17
WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	18
WNW	WNW	WNW	WNW	W	W	W	WNW	WNW	WNW	W	W	WNW	19
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	20
WNW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	21
NW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	22
NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	NW	23
WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	WNW	WSW	WSW	WNW	24
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	25
WNW	WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	26
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	N	27
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	28
NNW	NW	NNW	NNW	NNW	NNW	NNW	NE	SE	ENE	E	SE	NNE	29
E	NE	NNW	NNW	NNW	NNW	NNW	NW	NE	NE	ESE	ESE	ENE	30
WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	Mean.

OCTOBER.

WNW	WNW	NW	NNW	NNE	E	E	ENE	ENE	ENE	ESE	E	E	1
NW	NW	NNW	NNW	N	NE	NE	ENE	E	E	ENE	E	ENE	2
NW	NNW	NNW	NNW	NNW	ENE	ENE	ENE	ENE	SE	SE	SE	ENE	3
NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	4
NNW	NNW	NNW	NNW	NNW	E	N	ENE	E	ESE	E	SSE	NNE	5
NNW	NW	NNW	NNW	NNW	E	NNW	SW	ESE	ESE	ESE	ENE	ENE	6
NNW	NW	NNW	NNW	NNW	NW	WSW	SW	SW	SW	SW	SW	N	7
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	SW	SW	NW	8
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WSW	SW	SW	WNW	9
NW	NW	NW	NW	NW	E	N	SE	NE	ENE	ENE	E	ENE	10
ESE	E	NW	NNW	NW	NNW	NNW	NNW	NNW	NNE	NE	NE	NE	11
E	NE	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NE	NNE	12
SSE	E	NW	NNW	NNW	NNW	N	N	N	N	NNE	SE	ENE	13
WNW	WNW	WNW	SW	W	WNW	NW	NW	SW	WSW	SSE	SE	SW	14
ENE	NNW	NNW	NNW	N	NNE	NE	W	SSE	SSW	SSW	SW	ESE	15
NW	NW	NW	NW	NNW	NNW	N	N	NNE	NE	NE	ENE	N	16
WNW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NE	NE	NNE	17
WNW	NW	NNW	NNW	N	N	N	N	N	WSW	N	NNE	NNE	18
WSW	WSW	WNW	NW	NW	WNW	W	WNW	W	W	WSW	WSW	W	19
SW	SW	SW	SW	SW	SW	SW	SW	SSW	S	S	S	SSW	20
WNW	WSW	W	SW	SW	SW	SW	SW	S	SSW	SW	SW	S	21
W	WSW	WNW	W	NW	NW	NW	NW	NW	SE	SSE	SE	SSW	22
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	N	23
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	N	24
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	NE	N	25
SE	SSW	WNW	NW	NW	NNW	NNW	NNW	N	NE	NE	NE	NNE	26
SSE	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NE	N	ESE	NNE	27
NW	NW	NW	NW	NW	NW	NNW	NNW	N	NNE	NNE	NNE	N	28
E	E	ENE	NW	NW	NNW	NNW	NNW	N	NNE	NNE	ENE	ENE	29
ENE	E	NW	NW	NNW	NNW	NNW	N	N	N	N	NNE	NE	30
ENE	ENE	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	ENE	NE	31
NNW	NW	NW	NW	NNW	N	NNW	N	N	NE	E	ESE	NNE	Mean.

DIRECTION OF WIND, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER.

Date.	Hours (B. M. T.)											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
2	ESE	ENE	E	E	ENE	ENE	E	ENE	ENE	ENE	ENE	NE
3	NE	SE	SE	E	ENE	ENE	ENE	ENE	E	E	SE	NW
4	E	E	E	E	ENE	NE	ENE	ENE	ENE	E	ENE	ENE
5	E	ENE	E	ENE	ENE	NE	NE	ENE	NE	ENE	ENE	ENE
6	SE	ENE	E	E	E	E	E	E	E	E	ENE	ENE
7	NE	ESE	ESE	ENE	ENE	ENE	E	E	E	E	ENE	ENE
8	SE	ESE	ESE	ESE	ENE	E	ENE	ENE	ENE	E	ENE	ENE
9	SE	ESE	ESE	ENE	E	ESE	E	ESE	E	ESE	E	ENE
10	NE	ENE	NE	NE	ENE	ENE	E	E	E	E	ENE	E
11	ENE	NE	NE	ENE	NE	ENE	ENE	ENE	ENE	E	E	NW
12	SSE	SW	SW	SE	SE	SE	SE	SE	SE	SE	NW	WNW
13	SSE	SSE	SSE	SE	SE	SSE	SE	SE	SE	SE	S	NW
14	SE	SE	S	SE	SE	SE	SE	SSE	SSE	SSE	WNW	WNW
15	ESE	ESE	ESE	ESE	NE	NE	NNE	NNE	ENE	ENE	ENE	NNW
16	ESE	ENE	ENE	ESE	SE	SE	SE	SE	SE	SE	SE	SW
17	NE	E	SE	SE	SE	SE	ESE	ESE	SE	SE	E	ENE
18	ESE	ENE	NE	NNE	NE	ENE	ESE	E	E	ENE	ENE	ENE
19	SE	SE	SE	ESE	ESE	ESE	ESE	SE	SE	SSE	SSE	SSW
20	SE	SE	SE	SSE	SE	SSE	SSE	SE	SSE	SSE	WSW	WSW
21	SSE	SE	SE	SE	SSE	SSE	SSE	SE	SE	SE	SE	W
22	NW	NW	SSE	SSE	SE	SSE	SSE	SSE	SE	SE	SSE	W
23	NE	NE	NNE	NE	NE	NE	NE	ENE	ENE	NE	NNW	NNW
24	NE	E	E	ENE	E	ESE	ESE	E	ENE	E	E	WNW
25	SE	ESE	ENE	N	N	NNE	NNE	NNE	N	E	E	NNW
26	NNE	NE	NNE	N	N	NNE	NNE	NE	NNE	ENE	NNW	NNW
27	ESE	NNW	N	N	NNE	NE	E	E	ESE	ESE	E	WNW
28	SE	E	E	E	ESE	SE	SE	SE	SE	SE	SE	SE
29	SE	SE	SE	SE	E	ESE	ESE	SE	SE	SE	ESE	ESE
30	SE	E	ENE	E	E	E	ENE	ENE	E	E	ENE	NE
Mean.	ESE	E	E	E	E	E	E	E	E	ESE	E	SSE

DECEMBER.

1	ESE	E	ENE	E	ESE	ESE	SE	E	E	E	ESE	SE
2	E	ESE	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	SE
3	NE	ENE	ESE	E	ENE	NE	ESE	SE	SE	SE	ESE	SE
4	SE	SE	E	ESE	E	ESE	ESE	ESE	ESE	E	ESE	ESE
5	NNE	NE	NE	E	ENE	ENE	ENE	ENE	E	ENE	E	ENE
6	SE	SE	NE	NE	ENE	ENE	E	E	E	ENE	E	E
7	ESE	E	ENE	ESE	ENE	ENE	E	ESE	SE	ESE	SE	SE
8	ESE	E	ENE	ESE	E	E	E	ESE	ESE	E	E	ESE
9	SE	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	E
10	N	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
11	ESE	SE	E	E	E	ESE	ESE	ESE	SE	SE	ESE	SE
12	NE	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	E	E
13	NNE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE
14	ENE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE	E	ESE	ESE
15	ENE	E	ENE	ENE	ENE	E	E	E	E	E	ENE	ENE
16	NE	NE	ENE	ENE	NE	NE	NE	NE	NE	NE	ENE	NE
17	NE	NE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	E	E
18	ESE	E	ENE	ENE	ENE	E	NE	NE	NE	ENE	ESE	NE
19	ENE	ENE	SE	SE	E	E	E	ESE	ENE	ESE	SE	SE
20	ESE	SE	SE	SE	SE	SE	SE	SE	SSW	NE	NNW	NNW
21	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	E	NNW
22	NE	NNE	NE	NNE	NNE	NNE	NE	NE	NE	E	E	E
23	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NNE	E	NNW	NNW
24	NE	NNE	NE	N	NNE	NNE	E	ENE	ENE	E	ESE	NNW
25	NE	NE	NNE	NE	ENE	ENE	NE	ENE	E	E	E	ESE
26	NE	NNE	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	E
27	NE	NE	E	E	ENE	ENE	ENE	E	ESE	ENE	E	ESE
28	NNE	ESE	ESE	SE	ENE	ENE	NE	NE	ENE	ENE	ENE	ESE
29	NNE	NE	N	NNE	NE	NE	NE	NE	NE	NNE	N	NNW
30	NNE	NNE	NNE	NNE	NE	NE	NNE	NE	NE	NNE	N	N
31	NNE	NNE	NNE	NNE	NE	NE	NE	NE	ENE	ENE	E	E
Mean.	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	ENE

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER.

Hours (B. M. T.)												Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Mean.	
ENE	NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NE	NNE	1
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	NNE	2
NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	NE	NE	NNE	3
NW	NW	NW	NNW	NNW	NNW	NNW	N	NNE	NNE	NE	NE	NNE	4
WNW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NNE	NE	NNE	5
NE	ENE	NW	NNW	NNW	NNW	N	N	N	N	NNE	NE	NE	6
ENE	ENE	NW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NE	NE	7
NE	ENE	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NE	NE	8
E	WNW	NW	NNW	NNW	NNW	NNW	N	N	ENE	N	N	NE	9
ESE	WNW	NW	NW	NNW	NNW	NNW	N	N	NNE	NE	NE	NE	10
NW	NW	NW	NW	NW	NNW	NNW	N	ENE	SE	NNW	SE	N	11
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	SE	NNW	12
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNE	NNW	NW	13
NW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	NNW	NE	N	14
NNW	NNW	NNW	NNW	N	N	N	NNE	NE	NN	NNE	NNE	NNE	15
W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	NNE	NNE	NNE	SE	16
ENE	ENE	NW	NNW	NNW	N	N	N	NNE	NE	NE	ENE	ENE	17
E	NW	NW	NNW	NNW	N	N	NNE	NNE	NE	ESE	SE	NE	18
SW	SW	SW	SW	SW	SW	SSW	SSE	SSE	SE	SE	SE	SSE	19
W	W	W	W	WNW	WNW	WNW	WSW	WSW	WSW	SW	SSE	SSW	20
WNW	WNW	WNW	NW	NW	WNW	NW	WNW	WNW	NW	NW	NW	SW	21
NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	NE	NNW	22
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	N	23
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNE	NNE	NE	ENE	NNE	24
NW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	N	25
NNW	NNW	NNW	NNW	NNW	N	N	NNE	NE	NE	ESE	SE	N	26
WNW	WNW	NW	NNW	NNW	NNW	N	N	NNE	NE	NNE	NE	N	27
ESE	E	NE	NNW	NNW	N	N	N	NNE	NNE	NNE	NE	E	28
NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NE	NNE	SE	NNE	29
NE	ENE	NW	NNW	NNW	N	N	N	NNE	NE	ESE	ESE	NE	30
NNW	NW	NW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	ENE	NE	Mean.

DECEMBER.

NW	NW	NW	NNW	NNW	N	N	N	NNE	NNE	ESE	E	NE	1
W	NW	NW	NW	NNW	NNW	NNW	N	NE	NE	ENE	E	NE	2
SE	WNW	NW	NW	NW	NW	NW	NW	N	N	SE	SE	ENE	3
NW	NW	NW	NNW	NNW	NNW	N	N	N	NNE	ENE	NNE	NE	4
NW	NW	NW	NW	NW	NNW	N	NNE	NNE	NNE	SE	SE	NNE	5
NNW	NNW	NNW	NNW	N	N	N	N	NNE	NE	E	ESE	NNE	6
ESE	ESE	E	NW	NNW	NNW	N	N	NNE	NE	NE	ENE	ENE	7
SE	SE	NW	NW	NW	NNW	NNW	NNW	N	NE	NE	SE	ENE	8
ESE	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	NE	NE	NE	ENE	9
WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	SE	SE	SSW	10
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NE	NE	NE	11
NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NNE	NNE	NNE	NNE	12
ENE	ENE	NE	NNW	NNW	NNW	N	N	N	N	NNE	NE	NE	13
E	ENE	NE	NNW	NNW	NNW	N	N	NNE	NNE	NNE	NE	NE	14
ENE	E	NNW	NNW	NNW	NNW	N	N	N	N	NE	NE	NE	15
ENE	ENE	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	NE	NNE	16
NW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NE	NNE	17
WNW	WNW	NW	NW	NW	NNW	N	N	N	SW	SSE	SE	NE	18
SE	SSE	SSE	SSW	SW	SSW	SE	SE	ESE	ESE	SE	E	NE	19
N	NNW	N	N	N	N	N	N	N	N	NNE	NNE	NE	20
NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	NNE	N	21
NW	NW	NW	NNW	NNW	NNW	NNW	N	N	NNE	N	N	N	22
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	N	23
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NE	N	24
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NE	NNE	NNE	NNE	25
NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NE	NE	NNE	26
NW	NW	NW	NW	NNW	NNW	NNW	N	N	NNE	NE	NNE	NNE	27
SE	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	NNE	28
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	NNE	N	29
NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	N	30
WSW	WNW	NW	NW	NW	NW	NW	N	NNE	NE	NE	E	NNE	31
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NE	ENE	NNE	Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN DEGREES FAHRENHEIT.)

Date.	Hours (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	74·0	73·6	72·7	72·5	72·3	72·4	72·0	72·3	73·8	75·3	77·3	79·5	80·3	80·6	80·9
2	71·5	71·5	71·6	71·0	70·3	70·0	70·8	71·7	73·3	75·2	78·0	79·3	80·3	80·7	80·8
3	72·4	71·6	71·4	70·7	70·4	70·5	70·2	70·7	73·6	74·8	77·3	79·4	80·5	80·5	80·7
4	72·0	71·5	70·5	70·4	69·6	69·6	69·4	69·7	72·5	75·0	78·7	80·6	81·3	81·8	81·7
5	73·3	72·0	71·5	71·3	70·3	69·5	69.4	69·8	72·6	75·4	77·7	80·8	84·3	85·9	83·5
6	73·1	72·6	73·0	73·5	73·4	73·2	73·3	73·4	74·9	76·3	78·2	80·6	81·4	81·9	82·7
7	72·9	72.6	72·0	71·7	72·4	72·3	72·2	73·1	74·0	75·6	78·8	81·7	84·5	85·8	84·3
8	73·8	74·3	73·9	73·5	73·0	72·5	71·7	72·1	72·8	75·0	77·2	78·5	80·8	82·5	82·4
9	73·7	73·1	72·6	72·4	71·7	71·4	70·7	71·2	72·6	74·8	77·3	79·4	82·5	83·3	83·5
10	72·9	72·5	72·2	71·6	71·5	71·5	71·4	71·8	73·2	74·3	75·6	77·4	79·4	82·6	82·0
11	74·9	74·5	73·6	73·3	72·5	72·1	70·8	71·9	73·6	74·8	77.5	79·9	82·6	83·6	82·5
12	71·8	71·5	71·7	71·7	71·5	71·4	71·3	71·7	72·6	74·3	77·6	80·3	84·0	84·7	83·7
13	72·7	72·8	72·2	72·4	72·2	72·2	71·6	72·3	73·6	74·9	77·3	79·4	81·7	82·7	82·2
14	74·4	73·6	73·6	73·5	71·8	70·7	71·0	71·8	74·0	75·6	77·6	78·9	81·8	82·7	83·6
15	73·3	72·3	71·4	71·4	72·2	72·5	72·3	72·7	74·2	75·7	77·6	79·2	81·8	82·7	83·2
16	74·7	74·5	73·5	73·2	72·2	71·7	71·6	72·4	74·3	75·2	77·3	79·3	81·3	81·7	82·0
17	74·1	73·4	73·0	72·7	72·8	72·0	71·6	72·2	73·4	74·5	77·1	79·7	82·6	84·6	**86·2**
18	75·5	75·2	73·7	72·3	73·3	72·2	71·3	72·0	74.5	76·0	77·5	79·0	81·3	82·9	83·4
19	75·4	75·2	74·3	73·6	73·0	72·5	71·6	72·5	74·7	75·8	77·5	79·5	80·6	81·1	81·5
20	72·5	72·5	72·4	72·4	71·5	70·6	69·8	71·3	73·2	74·0	75·3	78·3	79·9	80·6	80·5
21	71·3	71·3	70·2	71·6	70·9	69·5	69·0	69·7	72·5	73·7	75·8	77·8	79·9	80·6	81·0
22	72·0	72·3	73·6	72·3	70·2	69·1	69·2	69·7	72·2	75·0	77·3	78·2	79·4	79·5	79·6
23	71·5	70·7	69·5	69·4	69·5	69·2	67·4	67·6	69·7	71·8	73·6	75·2	76·6	77·0	77·2
24	66·5	65·4	64·6	63·8	64·3	64·5	64·6	65·3	67·7	69·4	71·0	73·3	74·7	74·8	74·6
25	63·1	62·6	61·5	60·4	**59·9**	59·0	**58·3**	59·0	63·0	66·3	70·4	72·7	74·4	75·6	76·7
26	65·7	64·7	64·5	65·1	66·2	65·8	66·2	66·9	69·4	72·3	75·2	77·9	79·2	80·0	79·6
27	69·5	68·7	68·3	**67·3**	66·7	67·2	67·2	67·5	68·9	71·3	74·2	76·8	78·7	78·6	78·6
28	69·7	69·3	68·6	68·6	67·8	67·4	68·5	69·3	71·3	73·7	77·2	80·3	81·6	80·6	80·0
29	72·0	71·5	71·3	71·2	70·6	70·7	71·2	71·4	73·3	76·2	78·0	80·7	82·4	82·7	82·6
30	74·4	74·4	74·4	74·0	73·3	72·6	72·6	72·8	75·2	77·0	79·9	82·5	81·8	82·0	81·7
31	74·4	74·6	75·0	74·6	74·6	74·0	72·7	73·2	75·8	78·2	80·6	82·4	82·3	82·7	83·0
Mean . .	72·2	71·8	71·4	71·1	70·7	70·3	**70·0**	70·6	72·6	74·4	76·8	79·0	80·8	**81·5**	81·5
Variation .	−2·8	−3·2	−3·6	−3·9	−4·3	−4·7	**−5·0**	−4·4	−2·4	−0·6	+1·8	+4·0	+5·8	**+6·5**	+6·5
Mean in °C. .	22·3	22·1	21·9	21·7	21·5	21·3	**21·1**	21·4	22·6	23·6	24·9	26·1	27·1	**27·5**	27·5
Variation in °C..	−1·6	−1·8	−2·0	−2·2	−2·4	−2·6	**−2·8**	−2·5	−1·3	−0·3	+1·0	+2·2	+3·2	**+3·6**	+3·6

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1	73·9	74·0	74·3	73·5	73·5	73·6	72·8	72·2	74·8	76 7	78·9	81·2	80·3	**80·9**	80·9
2	74·4	74·0	73·2	72·6	72·0	71·1	70·0	70·3	73·1	75·8	77·8	79·8	80.8	81·0	80·3
3	73·9	72·6	71·5	70·6	71·6	70·7	69·4	70·2	74·3	77 0	79·9	82·0	83·0	**83·3**	82·9
4	73·7	73·3	73·2	71·6	70·5	70·6	70·7	72·3	74·9	77 0	79·8	81·1	82·0	82·5	82·1
5	72·7	73·8	74·5	73·3	72·2	72 4	71.7	71·9	75·2	78·0	80·8	82·6	82·7	82·4	82·3
6	74·6	74·3	73·5	72·3	71·7	71·5	71·1	71·5	73·8	75·3	76·8	77·7	78·1	78·1	78·0
7	70·9	69·8	69·9	70·0	69·4	69·0	68·9	70·0	72·0	74·0	76·0	77·1	77·5	78·8	79·3
8	71·1	70·6	70·3	69·5	68·7	**68·0**	68·0	68·9	71·1	73·5	75·6	77·3	78·9	79·4	80·1
9	71·1	70·9	69·9	69·0	68·4	68·6	68·7	69·6	72·7	74·5	76·8	78·3	80·3	80·5	81·0
10	72·4	71·6	71·5	71·0	70·8	71·0	70·9	72·1	74·3	75·6	77·5	78·5	79·6	80·4	80·6
11	72·7	73·1	72·0	71·9	71·5	71·5	71·4	72·1	73·9	75·0	76·9	78·6	79·7	80·1	80·0
12	72·6	72·2	72·9	73·0	72·1	71·7	71·4	72·3	73·7	75·3	77·3	78·4	79·0	79·5	80·0
13	71·7	70·9	70·3	70·9	70·9	70·5	70·1	70·9	73·4	75·6	77·3	78·5	79·3	79·8	79·5
14	72·8	71·9	71·5	71·3	71·1	71·2	71·3	71·9	74·0	76·3	77·5	78·9	79·5	80·5	80·5
15	74·0	73·0	72·2	71·7	72·1	72·0	71·5	72·3	74·3	76·1	78·0	78·7	79·6	80·1	80·5
16	74·5	74·5	74·3	73·9	73·0	72·8	72·6	73·2	74·9	76·0	77·9	78·6	79·6	80·6	80.3
17	74·1	74·0	73·5	72·6	72·2	72·5	72·0	72·8	74·6	76·2	77·9	79·3	79·8	80·2	80·3
18	71·7	70·8	70·8	70·9	70·7	70·1	69·4	70·3	72·6	74·9	76·7	77·9	79·0	79·5	80·3
19	72·1	71·3	70·7	71·5	71·6	70 4	69·8	71·4	72·6	74·1	76·4	78·2	79·0	79·5	80·1
20	72·0	71·7	70·9	70·8	70·5	70·6	70.4	71·4	72·6	73·9	75·5	76·0	77·6	78·4	79·0
21	69·6	70·2	69·9	70·3	70·5	69·8	70·1	70·9	72·7	74·1	76·5	78·3	79·7	79·8	80·2
22	72·7	72·1	72·8	71·6	70 6	70·8	71·4	72·0	73·8	75·2	77·2	79·2	80·3	81·3	81·8
23	73·5	73·5	72·6	72·5	71·8	72·5	72·5	73·2	75·1	76·7	78·8	79·7	80·2	80·7	81·0
24	74·2	74·3	74·3	74·2	74·0	73·9	73·2	73·0	74·2	76·2	77·9	79·1	80·1	79·9	80·0
25	74·6	74·8	74·8	74·0	73·3	72·8	72·5	73·0	75·0	76·4	78·2	79·8	80·9	81·5	81·4
26	73·8	73·5	72·9	73·0	72·2	71·6	71·8	73·0	75·4	76·4	78·3	79·1	79·7	80 1	80.2
27	73·1	72·7	71·8	71·5	72·0	71 8	71·6	72·8	75·1	77·5	79·5	80·2	81·3	81 9	82·1
28	74·2	74·0	73·3	72·9	73·5	73·0	73·3	74·9	76·6	78·1	80·0	82·5	84·2	84·9	**85·2**
Mean . .	72·9	72·6	72·3	71·9	71·5	71·3	**71·0**	71·8	74·0	75·8	77·8	79·2	80·1	80·6	**80·7**
Variation .	−2·6	−2·9	−3·2	−3·6	−4·0	−4·2	**−4·5**	−3·7	−1·5	+0·3	+2·3	+3·7	+4·6	+5·1	**+5·2**
Mean in °C .	22·7	22·6	22·4	22·2	21·9	21·8	**21·7**	22·1	23·3	24·3	25·4	26·2	26·7	27·0	**27·1**
Variation in °C..	−1·5	−1·6	−1·8	−2·0	−2·3	−2·4	**−2·5**	−2·1	−0·9	+0·1	+1·2	+2·0	+2·5	+2·8	**+2·9**

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN DEGREES FAHRENHEIT.)

Hours (B. M T.)									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
80·3	78·9	76·7	76·2	75·5	74·7	74·0	72·8	72·3	75·5	24·2	14 30	81·4	6 40	71·6	1
80·5	79·7	78·1	76·7	76·4	75·6	74·5	73·7	73·7	75.2	24·0	13 22	81·6	5 20	69·5	2
80·6	79·6	77·6	76·7	76·5	76·2	74·9	73·4	72·5	75·1	23 9	14 13	81·5	6 20	69·9	3
80·3	79·4	78·3	77·5	76·9	76·0	75·2	74·5	73·6	75·3	24·1	13 8	82·5	6 58	69·1	4
82·3	80·9	78·6	77·6	77·5	77·4	76·4	74·7	73·7	76.1	24·5	13 32	86·5	6 12	69·3	5
81·6	80·2	78·4	77·4	77·0	76·4	75·2	73·7	73·4	76·5	24·7	14 40	83·4	1 59	72·5	6
83·4	81·5	79·5	77·8	77·3	77·0	76·2	74·8	74·4	76·9	24 9	13 12	86·5	3 40	71·5	7
82·0	80·3	78·7	77·5	76·7	76·3	75·2	73·6	74·2	76·2	24·6	13 30	83·4	6 44	71·4	8
82·2	80·8	79·0	77·4	76·5	75·0	74·4	74·2	73·6	76·0	24·4	13 8	84·5	6 40	70·5	9
81·6	80.5	79·0	77·6	77·0	76·4	75·5	74·2	74·3	75·7	24·3	13 56	83·4	6 36	71·3	10
82·3	80·3	78·6	77·4	76·6	76·3	75·3	73·3	72·0	76·3	24·6	13 40	84·5	6 40	70.5	11
83·5	81·7	79·3	77·5	77·3	76·6	75·5	74·8	73·3	76.2	24·6	13 8	85·6	5 20	70·7	12
81·6	80·3	78·6	77·7	77·1	76·8	76·1	75·3	74·8	76·2	24·6	13 7	83·5	6 45	71·2	13
82·8	81·2	79·0	77·3	76·6	76·3	75·3	74·6	73·6	76·3	24·6	14 52	83·8	7 15	70·5	14
83·3	82·2	80·6	78·3	77·4	76·8	76·0	75·6	75·4	76·6	24·8	15 4	83·5	3 42	71·0	15
82·3	80·8	79·1	77·3	76·3	75·2	74·7	74·5	74·6	76·2	24·6	15 50	82·6	6 52	71·3	16
83·4	81·2	79·5	78·0	77·4	76·5	75·7	74·9	75·2	76·7	24·8	14 24	**86·6**	6 5	71·5	17
83·8	82·2	80·4	78·7	77·5	77·0	76·5	75·6	75·0	77·0	25·0	15 30	84·0	7 0	70·8	18
81·3	80·2	78·5	77·3	76·7	76·2	75·0	73·5	72·9	76·3	24·6	14 26	81·9	7 10	71·3	19
80·4	79·2	77·2	75·9	75·3	74·7	73·6	73·7	72·3	74·9	23·8	13 12	81·4	6 54	69·6	20
80·7	79·2	77·4	76·5	76·3	76·0	75·2	73·3	72·3	74·7	23·7	14 53	81·8	6 28	68·5	21
79·7	78·7	76·6	75·4	75·2	74·6	74·1	73·5	73·0	74·6	23·7	13 0	80·0	5 40	68·6	22
75·7	74·3	72·6	71·5	70·7	70.2	69·7	67·8	67·3	71·5	21·9	14 5	77·6	23 40	66·8	23
74·0	72·7	70·7	69·3	69·0	67·5	66·6	65·2	63·6	68·5	20·3	13 25	75·5	23 58	63·2	24
76·5	75·3	73·4	72·4	71·8	71·2	69·4	68·4	67·0	**67·8**	**19·9**	14 38	77·4	6 45	**58·0**	25
79·5	78·2	76·1	73·8	73·1	72.7	71·9	70·9	69·9	71·9	22.2	13 40	80·6	3 0	64·4	26
78·7	77·8	75·3	73·8	73·3	72·6	71·8	70·3	69·6	72·2	22·3	14 35	79·5	4 25	66·5	27
79·7	78·3	76·6	75·3	74·7	74·4	73·5	73·3	72·5	73·8	23 2	12 50	82·0	5 15	67·2	28
81·7	80·6	79·1	77·5	76·6	76·2	75·3	74·2	73·6	75·9	24·4	13 20	83·6	5 0	70·4	29
81·4	80·6	78·3	77·4	77·2	76·8	76·3	75·4	74·7	76·9	24·9	12 8	83·0	6 0	72·4	30
82·5	81·3	79·7	78·0	77·5	77·2	76·4	75·0	74·3	**77·5**	**25·**	14 35	83·6	7 0	72·5	31
81·0	79·6	77·8	76·4	75·8	75·3	74·4	73·3	72·7	75·0	23·9					Mean.
+6·0	+4·6	+2·8	+1·4	+0·8	+0·3	−0·6	—1·7	−2·3							Variation.
27·2	26·4	25·4	24·7	24·3	24·1	23·6	22 9	22·6							Mean in °C.
+3·3	+2·5	+1·5	+0·8	+0·4	+0·2	—0·3	—1·0	—1·3							Variation in °C

FEBRUARY.

80·6	79·0	77·1	76·2	75·8	75·5	75·1	74·5	74·4	76·2	24·6	11 38	81·7	7 25	72·0	1
80·4	79·5	78·0	77·0	76·7	76·4	75·9	74·9	74·2	75·8	24·3	12 41	81·5	6 58	69·6	2
82·1	81·9	80.0	78·6	78·5	78·0	77·2	75·5	74·4	76·6	24·8	13 21	83·7	6 30	69·3	3
81·3	80·0	78·7	77·4	77·2	76·8	75·6	74·3	73·6	76·3	24·6	14 17	82·8	6 57	69·7	4
82·0	80·8	78·9	77·5	77·1	76·5	76·1	75·4	75·1	76·9	24·9	12 10	83·6	7 0	70·8	5
77·4	76·5	75·2	73·8	73·2	72·8	72·8	72·9	72·4	74·4	23·6	14 25	78·7	7 0	70·9	6
79·4	78·6	76·5	74·5	73·7	73·2	72·9	72·4	71·6	73·6	23·1	15 7	79·9	6 0	68·4	7
79·8	78·7	77·1	75·6	75·1	74·8	74·5	73·7	72·7	73·9	23·3	14 27	80·6	6 10	**67·8**	8
80·9	80·2	78·1	76·8	76·1	75·6	75·2	74·1	73·3	74·6	23·7	14 43	81·7	4 20	68·4	9
80·5	79·5	78·1	76·5	75·7	75·0	74·4	74·1	73·5	75·2	24·0	14 0	81·0	4 5	70·5	10
79·8	78·5	77·0	75·8	75·5	75·0	74·5	73·9	73·2	75·1	23·9	12 39	80·5	6 10	71·3	11
79·5	78·8	77·2	75·9	75·4	74·9	73·9	73·0	72·1	75·1	23·9	14 18	80·5	6 40	71·3	12
79·1	78·0	76·7	75·5	75·1	74·8	74·6	74·3	73·2	74·6	23·7	12 51	80·1	6 31	70·0	13
80·0	78·9	77·5	76·0	75·5	75·3	75·1	74·6	74·4	75·3	24·1	13 20	81·0	4 43	71·2	14
80·3	79·0	77·2	75·9	75·5	75·3	74·8	74·3	74·3	75·5	24·2	14 25	80·7	6 35	71·4	15
79·5	78·6	77·2	76·1	75·6	74·9	74·2	74·0	74·2	75·9	24·4	13 35	81·0	6 20	72·5	16
80·0	79·1	77·5	76·4	75·9	75·6	75·2	73·4	72·3	75·7	24·3	14 56	80·6	6 30	71·5	17
80·2	79·4	77·9	76·5	75·5	74·7	73·9	72·6	72·5	74·5	23·6	15 10	80·6	6 58	69·3	18
80·0	79·5	77·6	75·5	74·4	73·8	73·2	71·8	72·0	74·4	23·6	14 35	80·5	6 40	69·6	19
78·6	77·8	76·1	74·0	72·6	72·3	71·0	70·3	69·9	**73·5**	**23·1**	14 23	79·5	23 56	69·6	20
80·0	79·8	78·5	77·0	76·6	76·4	75·8	74.3	74·3	74·8	23·8	15 0	80·5	0 34	69·5	21
81·9	81·5	79·6	77·9	77·4	76·8	76·0	74·9	74·0	75·9	24·4	16 18	82·3	4 40	70·5	22
81·0	80·3	78·7	77.1	76·6	76·3	76·1	75·8	75·0	76·3	24·6	15 20	81·5	4 40	71·6	23
79·5	78·7	77·2	76·4	75·9	74·3	73·7	73·9	74·2	75·9	24 4	12 36	80·8	7 30	72·8	24
81·4	80·9	79·6	77.8	76·8	76·0	75·5	74·9	74·4	76·7	24·8	15 40	82·1	6 10	72·4	25
79·8	79·7	77·7	76·3	75·8	75·4	75·2	74·9	73·8	75·8	24·3	14 3	81·0	5 30	71·5	26
82·0	81·2	80·0	78·8	78·2	78·0	77·2	76·0	75·1	76·7	24·8	15 22	82·7	6 30	71·3	27
84·8	83·4	81·8	79·8	79·0	78·6	77·8	76·5	76·0	**78·3**	**25·7**	14 53	**86·0**	3 30	72·5	28
80·4	79·6	77·9	76.5	75·9	75·5	74·9	74·1	73·6	75·5	24·2					Mean.
+4·9	+4·1	+2·4	+1·0	+0·4	0·0	—0·6	—1·4	—1·9							Variation.
26·9	26·4	25·5	24·7	24·4	24·2	23·8	23·4	23·1							Mean in °C.
+2·7	+2·2	+1·3	+0·5	+0·2	0·0	—0·4	—0·8	—1·1							Variation in °C

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Date.	Hours (B.M.T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	75·5	75·7	75·9	75·0	74·2	74·2	73·8	74·7	77·4	79·0	81·7	85·7	85·1	84·7	84·5
2	74·6	75·4	75·6	75·4	74·2	73·5	73·5	74·6	76·4	78·0	81·1	81·7	81·9	82·3	82·2
3	74·1	74·5	74·1	73·3	73·5	72·9	72·5	74·0	75·6	76·6	78·0	80·3	81·4	81·6	81·7
4	73·5	72·7	72·3	72·4	72·1	72·2	**71·6**	72·7	75·2	78·4	80·6	80·8	81·2	81·6	82·4
5	73·3	72·7	73·0	73·3	73·0	72·4	71·6	72·9	76·0	77·8	79·9	82·3	82·7	84·0	83·4
6	75·4	74·6	74·8	75·5	74·3	72·6	72·3	73·9	76·3	77·6	80·3	83·1	84·7	85·5	85·4
7	76·8	76·9	76·7	76·2	75·4	75·4	75·0	76·4	77·8	79·3	80·7	82·2	83·5	84·0	84·0
8	76·7	75·7	74·6	74·1	74·0	74·1	74·4	75·5	77·3	78·6	79·7	81·0	82·3	82·6	83·3
9	77·6	77·4	77·2	76·7	76·4	75·3	74·4	76·2	78·6	80·3	82·5	83·6	84·3	84·5	84·3
10	77·5	76·6	76·7	76·9	75·3	75·0	74·2	76·2	79·7	81·8	84·2	84·9	85·2	85·7	85·4
11	77·2	76·7	76·3	76·3	75·6	75·4	75·2	77·4	80·5	81·6	82·9	83·4	83·7	84·0	83·3
12	75·6	75·1	74·8	75·8	75·0	73·8	73·9	76.4	78·2	79·6	82·3	84·0	84·1	84·3	84·4
13	76·9	77·0	77·0	76·5	76·1	76·0	76·2	77·5	79·9	81·5	83·5	84·5	85·4	85·5	85·3
14	79·5	79·6	79·1	78·2	77·7	77·7	77·8	78·9	80·9	82·5	85·0	86·8	86·4	86·1	85·8
15	79·5	79·7	79·8	79·4	79·7	79·7	79·8	80·6	84·2	84·8	87·5	92·3	93·5	**95·2**	94·0
16	81·6	81·7	81·0	80·5	79·7	78·7	79·4	79·8	81·4	84·1	86·4	86·9	87·2	86·9	86·7
17	79·5	78·3	78·3	78·7	78·6	78·0	77·5	78·3	79·9	81·8	83·6	84·4	85·1	85·3	85·5
18	77·8	78·0	78·2	78·0	77·0	76·6	76·7	78·1	80·1	81·5	83·2	84·1	85·0	85·4	85·7
19	79·6	79·1	78·4	77·5	76·9	76·7	76·4	77·9	81·2	83·2	84·8	85·9	87·0	87·4	87·0
20	79·5	78·8	78·0	77·5	77·0	76·4	76·5	78·8	81·9	83·8	84·6	85·5	85·8	85·6	85·7
21	78·3	77·9	77·5	77·2	76·3	75·7	76·0	77·1	79·5	81·0	82·3	83·3	84·1	84·5	85·0
22	78·2	78·0	77·8	76·8	76·3	76·2	76·8	78·0	80·4	83·0	85·2	85·2	86·0	86·3	86·5
23	78·9	78·6	78·5	78·4	77·2	76·5	76·8	78·2	80·7	82·4	83·9	84·5	84·7	85·0	85·0
24	76·9	77·2	77·4	77·2	77·1	77·1	77·6	78·9	80·6	81·9	82·7	83·5	83·7	83·9	83·9
25	77·7	77·6	77·5	77·5	77·3	76·7	76·8	78·0	79·6	81·2	82·6	83·5	83·9	84·0	84·0
26	77·0	76·5	76·0	75·5	75·4	74·6	74·1	75·9	78·3	79·9	81·9	82·1	82·9	83·6	84·1
27	77·0	76·8	76·6	76·5	75·6	74·7	75·3	76·8	77·8	80·0	82·2	83·1	83·6	84·0	84·0
28	76·6	75·9	75·2	74·7	74·8	74·8	75·2	76·5	78·1	79·3	80·9	82·2	83·1	84·1	84·1
29	76·7	76·4	75·8	75·2	75·0	74·8	74·9	76·3	78·8	81·0	83·0	84·2	84·6	85·7	85·9
30	79·4	79·4	79·5	79·0	78·7	78·3	77·5	78·3	82·0	85·9	89·7	89·0	88·7	88·8	88·4
31	80·6	80·5	79·9	79·4	79·0	78·0	77·5	79·4	81·6	83·1	85·9	87·3	87·4	86·9	87·0
Mean .	77·4	77·1	76·9	76·6	76·1	75·6	**75·5**	76·9	79·2	81·0	83·0	84·2	84·8	**85·1**	85·1
Variation .	—2·7	—3·0	—3·2	—3·5	—4·0	—4·5	**—4·6**	—3·2	—0·9	+0·9	+2·9	+4·1	+4·7	**+5·0**	+5·0
Mean in °C .	25·2	25·1	24·9	24·8	24·5	**24·2**	24·2	24·9	26·2	27·2	28·3	29·0	29·3	**29·5**	29 5
Variation in °C.	—1·5	—1·6	—1·8	—1·9	—2·2	**—2·5**	—2·5	—1·8	—0·5	+0·5	+1·6	+2·3	+2·6	**+2·8**	+2·8

APRIL.

1	79·3	79·2	78·9	78·9	78·0	78·2	78·7	79·7	81·8	83·0	83·3	84·0	84·7	85·4	85·5
2	77·7	77·6	78·3	78·5	77·2	**76·0**	77·1	78·9	80·9	82·1	84·9	85·7	85·5	86·0	85·4
3	79·0	78·7	77·9	77·8	77·2	76·9	76·5	79·4	82·4	84·3	86·0	86·4	86·9	87·2	87·5
4	81·2	80·2	79·4	79·3	79·2	80·0	79·9	80·9	84·1	86·5	89·8	91·1	90·4	90·0	89·2
5	81·4	81·3	80·8	80·8	80·2	79·8	79·5	81·2	85·0	86·8	87·5	88·2	88·1	88·1	87·2
6	80·4	80·3	80·0	79·9	79·5	79·1	79·5	80·8	82·6	84·0	85·2	85·9	86·3	86·8	86·9
7	80·1	79·8	79·1	78·8	78·3	77·6	77·5	79·0	81·9	84.0	85·1	86·0	86·5	87·5	87·0
8	78·9	79.1	78·8	77·7	76·7	76·4	76·8	78·9	82·3	85·0	88·0	89·3	89·3	88·7	88·9
9	80·5	80·5	80·2	79·5	79·0	78·2	77·4	79·5	83·5	88·0	89·2	89·4	88·8	89·1	89·9
10	82·7	82 2	82·3	82·5	82·5	82·5	82·8	83·9	85·5	87·0	88·2	87·6	88·2	89·0	88·6
11	81·5	81·5	81·4	81·3	81·1	81·0	81·1	82·0	83·4	84·6	85·2	85·7	86·1	86·0	85·8
12	81·5	81·5	81·4	81·4	81·3	81·1	81·0	82·1	83·8	85·0	85·9	86·7	87·3	87·4	87·2
13	81·5	81·5	81·4	81·3	81·3	81·1	81·5	82·8	84·4	85·5	86·6	87·2	87·9	87·8	87·5
14	81·5	81·3	81·1	81.0	81·0	80·8	81·0	82·1	83·6	84·7	86·1	86·6	87.4	87·5	87·3
15	81·4	81·1	81·0	80.6	80.5	80·4	80·9	82·1	83·5	84·6	86·1	86.8	87·1	87·1	86·9
16	81·5	81·3	80·8	80·5	80·4	80·1	80·8	82·1	84·2	84·9	85·8	87·0	87·7	88·2	87·8
17	80·8	80·8	80·9	80·2	79·9	79·5	79·4	80·8	83·9	86·3	87·5	87·6	88·5	88·9	89·2
18	82·6	82·3	81·9	81·5	81·5	81·6	82·4	84·1	87·5	90·0	91·7	92·4	**92·8**	92·6	91·6
19	83·9	84·3	83·7	83·5	83·1	82·9	83·3	84·2	85·3	86·4	87·5	88·5	88·5	89·0	88·6
20	83·1	82·8	82·6	82·5	82·1	81·8	82·3	84·1	85·7	86·6	87·6	87·5	88·3	88 6	88·7
21	82·0	81·7	81·6	81·5	81·5	81·5	82·0	83·1	84·3	85·3	86·2	87·0	87·9	88·9	88·4
22	81·2	81·0	80·7	80·7	80·0	80·0	80·6	81·8	83·6	84·7	86·1	86·6	87·4	87·0	86·8
23	80·5	80·4	80·0	79·9	79·8	79·2	79·6	81·0	82·6	83·1	84·2	85.1	86·0	86·6	86·8
24	79·5	79.5	79·1	79·0	79·0	78·4	78·8	80·2	82·5	84·0	84·7	84·4	85·8	85·2	86·4
25	79·9	79·5	79·1	79·2	79·1	78·4	78·1	79·4	82·0	83·0	84·7	85·3	85·9	86·6	86·0
26	80·1	79·9	79·5	79·5	79·0	79·1	79·7	81·1	81·9	83·2	84·7	85·7	86·8	87·1	87·0
27	80.1	80·0	79·5	79·5	79·4	78·9	79·8	81·2	82·9	84·4	85·1	86·0	86·4	86·6	87·0
28	80·1	80·2	80·0	80·3	80·3	80·0	80·4	81·6	83·3	84·2	85·7	86·2	86·6	87·5	87·3
29	80·2	79·9	79·5	79·5	79·5	79·5	79·8	81·2	83·2	84·6	84·9	86·3	86·7	87·2	87.4
30	81·0	81·0	80·8	80·5	80·2	80·1	80·8	82·2	83·9	85·2	86·5	87·0	87·5	87·6	87·8
Mean .	80·8	80·7	80·4	80·2	79·9	**79·7**	80·0	81·4	83·5	85·0	86·3	87·0	87·4	**87·7**	87·6
Variation .	—2·6	—2·7	—3·0	—3·2	—3·5	**—3·7**	—3·4	—2·0	+0·1	+1·6	+2·9	+3·6	+4·0	**+4·3**	+4·2
Mean in °C .	27·1	27·1	26·9	26·8	26·6	**26·5**	26·7	27·4	28·6	29·4	30·2	30·6	30·8	**30·9**	30·9
Variation in °C.	—1·5	—1·5	—1·7	—1·8	—2·0	**—2·1**	—1·9	—1·2	+0·01	+0·8	+1·6	+2·0	+2·2	**+2·3**	+2·3

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Hours. B.M.T.									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21 - 22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
84.3	83·7	82·0	80·1	79·3	78·5	77·5	76·0	75·2	78·9	26·1	11 52	86·5	6 45	73·5	1
82·4	81·5	79·8	78·1	77·3	76·7	76·0	75·6	74·6	77·6	25·3	13 54	82·6	6 48	73·3	2
81·4	80.8	79·1	77·5	76·8	76·4	75·8	75·5	74·9	76·8	24·9	13 12	82·2	6 30	72·3	3
82·3	81·3	79·5	78·0	77·6	77·0	76·3	74·8	74·0	**76·7**	**24·8**	14 52	83·0	6 31	**71.5**	4
83·1	82·6	81·2	79·6	79·0	78·6	78·3	77·4	76·7	77·7	25·4	13 20	84·6	6 28	71·5	5
84·3	82·8	81·5	79·5	79·4	79·2	78·3	77·5	77·1	78·6	25·9	13 0	86·1	6 35	72.0	6
83·5	82·4	81·3	79·5	78·7	77·6	76·7	76·8	77·2	78·9	26·1	14 25	84·5	6 30	74.8	7
82·8	82·2	81·0	79·7	79·5	79·4	79·2	78·4	78·2	78·5	25·8	15 2	83·7	4 20	73·9	8
84·4	83·7	81·8	80·5	80·5	79·9	79·4	78·4	78·4	79·8	26·6	13 23	85·3	6 40	74·2	9
84·3	83·5	82·6	81·5	81·2	81·2	80·6	78·6	77·6	80·3	26·8	13 34	86·3	6 30	74·0	10
82·9	82·1	80·9	79·2	78·6	78·4	77·6	76·5	76·5	79·3	26·3	12 50	84·5	6 10	74·7	11
84·5	83·5	82·0	80·3	79·9	79·1	78·1	77·9	77·8	79·2	26·2	15 10	85·0	6 0	73.5	12
85·2	84·7	83·5	81·9	81·2	80·9	80·5	80·3	79·9	80.7	27·1	13 5	86·0	5 38	75·7	13
85·7	84·4	83·5	82·8	82·3	81·9	81·2	80·7	80·1	81·9	27·7	11 22	87·3	5 58	77·4	14
91·7	91·2	88·5	85·9	84·6	83·4	83·0	82·5	81·8	**85·1**	**29·5**	12 10	**95·5**	3 21	79·0	15
86·2	85·2	83·9	81·9	81.0	79·8	79.8	80·4	80·3	82·5	28·1	12 47	87·6	5 40	78·3	16
85·2	84·9	83·9	82·1	81·0	79·8	79·1	78·5	78·4	81·1	27·3	12 42	85·6	6 10	77·1	17
85·6	84·9	83·7	82·1	81·7	81·4	81·2	80·5	79·8	81·1	27·3	15 1	86·4	6 30	76·5	18
86·5	85·6	84·1	82·4	81·7	81·2	80·8	80·4	80·0	81·7	27·6	13 5	88·2	6 15	76·3	19
85·0	84·0	82·2	80·5	80·1	79·9	79·7	79·2	78·6	81·0	27·2	12 45	86·7	5 35	76·2	20
84·5	83.9	83·0	81·6	81·0	80·5	80·2	79·5	78·8	80·4	26·9	14 25	85·5	5 25	75·5	21
86·6	85·4	84·2	82·4	81·7	81·0	80·2	79·5	79·1	81.3	27·4	14 37	87·2	5 5	76.0	22
84·8	83·8	82·0	80·0	79·4	78·9	78·5	78·0	77·2	80·5	26·9	12 30	85·4	5 30	76·4	23
83·4	82·9	81·5	79·8	79·3	78·7	78·4	78·1	78·0	80.0	26·7	15 0	84·4	0 15	76·8	24
83·3	82·1	80·5	79·1	78·5	78·1	78·0	77·5	77·4	79.7	26.5	13 45	84·5	6 10	76·8	25
84·0	83·0	81·5	79·7	79·1	78·5	78·1	77·8	77·6	79·0	26·1	14 28	84·5	6 40	73·8	26
84·0	83·2	81·7	79·8	79·0	78·3	77·9	77·6	77·2	79·3	26·3	13 30	84·4	5 58	74·5	27
84·0	83·0	81·7	79·8	78.8	78·3	78·0	77·5	77·2	78·9	26·1	14 30	84·6	4 2	74·4	28
85·4	84·7	83·9	83·2	83·1	82·4	81·0	80·2	79·8	80·5	26.9	14 30	86·5	6 0	74·5	29
87·8	86·7	85·5	84·5	84·3	84·0	83·5	82·5	81·2	83·4	28·6	11 0	90·5	6 40	77·4	30
86·1	85·1	84·2	82·9	81·7	80·9	80·2	79·6	79·3	82·2	27.9	12 20	88·0	6 30	77·3	31
87·3	83·8	82·4	80·8	80·2	79·7	79·1	78·5	78·1	80·1	26·7					Mean.
+4·6	+3·7	+2·3	+0·7	+0·1	—0·4	—1·0	—1·6	—2·0							Variation.
29·3	28·8	28·0	27·1	26·8	26·5	26·2	25·8	25·6							Mean in °C
+2·6	+2·1	+1·3	+0·4	+0·1	—0·2	—0·5	—0·9	—1·1							Variation in °C

APRIL.

85.5	84.9	83·2	81·5	81·0	80·4	79·9	79·0	78·3	81·3	27·4	13 55	85·8	5 0	77·5	1
85.0	84·3	83·0	81·5	81·0	80·5	80·1	79 6	79·4	**81.1**	**27·3**	13 0	86·0	5 49	**75·6**	2
87.7	86.9	85·7	84.2	83·4	82·9	82·8	82·3	81·6	82·6	28·1	14 55	**88·4**	6 20	76·0	3
88.9	87.3	86·1	85·0	85·0	84·5	84·0	82·9	82·0	84·5	29·2	11 50	91·5	4 7	78·6	4
87.3	86.3	85·0	83·5	82·5	81·1	80·5	80.6	80·5	83·5	28·6	12 37	88·7	6 20	79·0	5
86.8	85.4	83·8	82·0	81·2	80·8	80·5	80·5	80·5	82·4	28·0	15 2	87·5	6 0	79·0	6
87.3	86.9	85·8	83·6	82·7	81·4	80·7	80·0	79·2	82·3	27.9	13 30	88·0	6 12	77.2	7
88.1	87.5	86·6	85·0	84·5	84·0	83·8	82·1	81·0	83·2	28·4	12 18	90·0	6 3	76.0	8
89.3	88.1	87·2	86·0	85·5	84·7	84·1	84·0	84·0	84·4	29·1	14 25	90·5	6 27	77.2	9
88.1	87.2	85·5	84·1	83·5	83·0	82·6	82·0	81·7	84·7	29·3	13 25	89·5	1 5	81·5	10
85.5	84.8	84·0	82·5	82.1	82·0	81·9	81·9	81·8	83·1	28·4	11 39	86·5	6 0	80·9	11
86.7	86.0	84·9	83·4	82·6	82·2	82·0	81·9	81·8	83·6	28·7	13 10	87·7	6 40	80·8	12
87.4	86·6	85·0	83·9	83·3	82·7	82·5	82·1	81·9	83·9	28·8	13 0	88·5	5 40	81·0	13
87.6	86.7	85·0	83·7	83·0	82·5	82·1	81·8	81·5	83·6	28·7	14 10	87·8	5 50	80·5	14
87.0	86.2	85.0	83·6	83·0	82·6	82.4	82·0	81·8	83·5	28·6	13 0	87·6	5 40	80·3	15
87.2	85.7	84·0	82·8	82.2	82·0	82.1	81·5	81·2	83·4	28·6	13 40	88·5	5 30	80·0	16
88.6	87.8	86·6	84·5	84·0	83·6	83 6	83.1	83·0	84·1	28·9	14 18	90·0	6 10	79·3	17
91.4	91.1	90·4	89·3	88·6	87·3	86·7	84.4	83·9	**87·0**	**30·6**	12 15	**93·5**	4 40	81·5	18
88·3	87.7	87·1	85·5	84.7	84·6	84·2	83.6	83·4	85·5	29·7	13 16	89·5	5 52	82.6	19
87.8	87.1	85·9	84·3	83·7	83·4	83.5	82·8	82·4	84·8	29·3	14 21	89·4	6 0	81·7	20
87.7	86.6	85.2	83·8	83·1	82·5	81.7	81·3	81·2	84·0	28·9	13 35	89·6	6 10	81·4	21
86.5	85.5	84·1	82·5	82·0	81·5	81·3	81.0	79·9	83·0	28·3	13 25	87.8	5 0	79·5	22
86.5	85.7	84.1	82·5	81·6	81.0	80·7	80.2	79·8	82·4	28·0	13 40	87·5	6 0	79·2	23
85.6	85.1	82·0	82·2	81·4	81·0	80·5	80·3	80·0	81·9	27.7	14 15	86·4	5 55	78·0	24
87.3	85.6	84·1	82·6	81·9	81·5	81·2	81·0	80·5	82·2	27·9	15 16	87·3	6 7	78·1	25
87.0	86.3	84.8	82·9	82·1	81·5	81·1	80·6	80·4	82·5	28·1	15 40	87·5	4 40	78·7	26
87.0	86.0	84·5	82·9	82·1	81·5	81·0	80·7	80·5	82·6	28.1	13 10	87·6	5 42	78·7	27
86 6	85.8	84·5	82·8	82·0	81.5	81·2	80·7	80·5	82·9	28·3	13 25	87.9	6 0	79·5	28
87.1	86.2	84·7	82·7	82·1	81.7	81·5	81·5	81·3	82.8	28.2	15 3	87·8	5 40	79·3	29
87.5	86.7	85·2	83·7	83·0	82.7	82·5	82·4	82·1	83·7	28·7	14 28	88·3	5 30	79·9	30
87·3	86·5	85.1	83·6	83·0	82·4	82·1	81·6	81·2	83·4	28·6					Mean.
+3·9	+3·1	+1·7	+0·2	—0·4	—1·0	—1·3	—1·8	—2·2							Variation.
30·7	30·3	29·5	28·7	28·3	28·0	27·8	27·6	27·3							Mean in °C
+2·1	+1·7	+0·9	+0·1	—0·3	—0·6	—0·8	—1·0	—1·3							Variation in °C

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY (IN DEGREES FAHRENHEIT.)

Date.	Hours (B.M.T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	81·7	81·7	81·5	81·5	81·0	80·5	81·2	82·9	84·4	85·6	86·4	87·0	88·0	88·7	88·8
2	82·2	81·6	81·3	81·3	81·6	81·6	82·0	83·2	84·8	86·0	87·1	88·2	88·3	88·6	88·0
3	82·2	82·0	81·7	81·6	81·3	80·9	81·2	83·2	85·1	86·5	87·2	87·6	88·4	88·3	88·3
4	82·2	82·1	82·0	81·7	81·5	80·8	81·5	83·3	84·6	85·7	86·7	87·6	88·4	88·4	88·2
5	81·6	81·3	81·0	80·5	80·2	79·6	80·6	82·3	84·2	85·1	86·1	86·9	87·7	88·4	88·7
6	81·5	81·1	81·0	80·9	80·6	80·4	80·8	82·3	82·9	84·0	85·5	86·4	87·5	88·4	88·1
7	81·8	81·5	81·2	81·0	80·6	80·3	81·2	83·0	83·5	84·9	86·5	87·4	88·1	88·4	88·4
8	82·5	82·4	82·0	81·6	81·6	81·7	82·4	83·9	85·4	86·7	87·8	88·5	89·0	89·5	89·2
9	82·3	82·0	81·7	81·6	81·6	81·8	82·4	83·9	85·1	86·7	88·3	88·6	89·2	88·5	88·3
10	82·6	82·4	82·3	82·1	82·0	82·0	82·8	84·3	85·7	87·3	88·2	88·6	88·5	88·8	88·5
11	82·6	82·4	82·1	82·1	82·4	82·3	82·6	83·7	85·2	86·0	87·3	88·2	89·0	89·5	89·5
12	83·2	83·0	82·9	82·8	82·7	82·7	83·1	83·9	84·9	86·3	87·4	88·6	89·1	89·9	89·5
13	83·0	82·9	82·5	81·9	81·7	82·3	82·9	83·9	84·8	86·2	87·5	88·8	89·6	90·0	89·6
14	83·9	83·5	83·2	83·0	82·6	82·8	83·5	84·9	86·5	88·0	89·0	89·9	90·2	89·5	89·2
15	79·4	79·2	78·6	79·4	80·3	80·5	80·8	81·6	82·8	84·9	86·5	87·6	87·6	86·7	87·4
16	83·6	83·2	82·5	81·9	82·0	82·3	82·9	83·8	84·6	86·3	87·6	88·8	89·0	88·3	86·7
17	79·5	80·0	80·3	80·5	80·7	81·2	81·7	82·1	83·8	85·9	84·8	85·8	85·8	86·2	84·0
18	79·7	79·8	79·6	79·1	79·8	80·2	79·9	79·8	80·5	82·1	83·5	84·2	85·1	85·3	85·5
19	81·0	80·8	80·5	80·1	79·9	79·8	80·5	81·8	83·7	84·5	85·4	86·1	86·0	86·7	86·8
20	80·1	79·7	80·2	79·8	79·6	80·1	80·8	82·2	83·8	85·0	86·0	85·0	86·1	86·8	87·0
21	82·5	82·1	81·7	81·8	81·6	81·6	81·9	82·6	83·8	85·1	86·3	87·0	87·6	88·1	88·3
22	83·0	82·7	82·5	82·3	82·1	81·6	82·3	83·7	84·8	85·7	86·7	87·4	88·1	88·6	88·6
23	83·0	82·8	82·5	82·5	82·4	82·3	82·9	84·1	85·2	86·4	87·3	88·0	88·6	89·3	89·0
24	83·1	82·8	82·6	82·5	82·3	82·2	82·7	83·7	85·1	86·0	87·2	87·7	88·5	88·7	88·7
25	83·4	83·2	82·9	82·8	82·5	82·5	83·0	84·2	85·5	86·7	87·4	88·0	88·3	88·5	88·4
26	83·8	83·6	83·3	82·9	82·3	82·2	83·0	84·2	85·4	86·6	86·8	87·8	88·6	88·9	89·0
27	84·3	84·2	84·0	83·9	83·7	83·5	83·9	84·8	86·1	87·1	88·1	88·5	89·4	90·1	**90·6**
28	84·4	84·3	84·0	83·7	83·6	83·4	83·7	84·6	86·0	87·5	88·5	89·2	89·5	90·0	90·0
29	84·5	84·1	82·6	83·4	83·5	83·6	83·9	84·5	86·1	87·8	87·8	88·2	89·4	89·8	89·9
30	84·6	84·5	84·4	84·4	84·2	84·2	84·3	84·6	85·7	87·2	87·5	88·6	89·6	89·8	90·0
31	82·3	82·1	82·4	82·3	81·7	81·8	81·8	83·8	84·5	86·0	87·9	89·0	90·2	90·4	90·0
Mean .	82·4	82·2	82·0	81·8	**81·7**	81·7	82·2	83·4	84·7	86·0	87·0	87·7	88·3	**88·6**	88·5
Variation .	−2·2	−2·4	−2·6	−2·8	**−2·9**	−2·9	−2·4	−1·2	+0·1	+1·4	+2·4	+3·1	+3·7	**+4·0**	+3·9
Mean in °C. .	28·0	27·9	27·8	27·7	**27·6**	27·6	27·9	28·6	29·3	30·0	30·6	30·9	31·3	**31·4**	31·4
Variation in °C.	−1·2	−1·3	−1·4	−1·5	**−1·6**	−1·6	−1·3	−0·6	+0·1	+0·8	+1·4	+1·7	+2·1	**+2·2**	+2·2

JUNE.

1	81·5	81·4	81·2	80·9	80·6	80·4	79·8	79·8	80·5	80·4	80·5	81·4	81·0	80·4	80·5
2	81·6	80·5	80·1	80·0	80·0	80·0	80·5	80·7	81·8	82·1	81·3	81·0	82·0	82·6	82·7
3	82·0	82·3	81·8	81·8	81·3	81·0	81·0	81·3	83·0	84·2	84·3	84·8	85·3	86·2	86·0
4	80·5	80·0	80·0	80·0	79·8	79·8	80·5	81·2	82·5	83·2	84·3	84·6	85·2	85·4	86·0
5	83·4	82·6	82·7	82·7	82·6	82·6	83·2	84·0	85·2	86·3	87·2	87·6	88·2	88·3	88·4
6	81·4	81·9	82·4	82·4	82·4	82·5	82·7	83·7	84·6	85·7	86·8	87·5	87·7	88·2	88·3
7	83·4	83·2	83·0	82·7	82·6	82·2	81·5	82·3	84·2	85·3	86·6	86·3	86·6	87·3	87·5
8	82·6	82·4	81·7	78·7	78·6	78·8	79·4	79·2	80·2	82·3	83·8	84·7	85·6	86·3	86·7
9	83·3	83·0	82·7	82·5	82·5	82·1	82·5	83·4	85·3	86·6	87·3	87·6	88·3	88·6	88·6
10	83·8	80·6	82·3	82·7	83·0	83·2	83·4	84·2	85·0	86·7	87·6	88·3	89·0	89·2	89·4
11	84·2	84·1	83·8	83·6	83·5	83·5	83·8	84·7	85·5	85·8	87·4	88·3	89·0	89·1	89·3
12	83·7	83·5	83·4	83·3	83·0	83·0	83·3	84·5	86·1	86·9	87·7	88·2	89·0	89·2	89·1
13	83·4	83·4	83·3	83·2	83·0	82·9	83·4	84·3	85·5	86·7	87·7	88·2	88·6	89·0	89·0
14	83·9	83·7	83·4	83·2	83·1	83·0	83·6	84·5	85·5	86·5	87·4	88·2	88·5	88·8	89·0
15	83·6	83·6	83·5	83·0	82·9	82·6	82·5	82·3	83·7	85·4	86·6	87·6	88·6	88·9	89·3
16	84·3	84·2	83·9	83·7	83·5	83·2	83·0	83·5	85·3	86·7	87·4	87·7	87·4	87·7	88·2
17	83·6	82·6	82·7	83·0	82·6	82·6	83·2	84·2	84·8	85·6	86·6	88·3	88·2	87·7	87·6
18	83·8	83·7	83·5	83·6	83·5	83·1	82·6	83·2	83·3	84·9	87·2	88·6	89·3	**89·5**	88·7
19	83·7	83·5	83·5	82·9	81·7	81·4	81·3	81·3	81·5	82·6	85·0	87·1	87·8	87·6	87·3
20	82·6	82·7	82·7	82·6	82·6	82·5	82·4	82·2	82·3	82·1	82·5	83·8	84·4	84·8	84·7
21	81·3	79·5	78·6	78·6	79·2	78·8	79·8	81·8	82·8	83·5	83·9	85·0	83·2	83·1	79·7
22	81·5	82·2	81·2	79·3	80·6	80·6	80·2	80·5	79·0	81·1	81·3	81·2	81·3	81·8	81·3
23	81·8	82·5	82·5	82·5	82·5	82·5	82·5	82·3	83·4	84·6	85·1	85·7	84·1	82·3	84·0
24	80·5	80·9	80·3	79·3	78·6	79·0	79·6	80·3	80·7	81·0	80·3	79·9	79·6	79·2	**77·8**
25	82·5	82·5	82·4	82·4	82·5	81·7	80·3	81·4	82·5	83·3	84·1	85·3	85·6	81·9	83·5
26	80·2	81·6	81·3	82·2	82·4	82·5	82·7	83·5	84·4	85·2	84·9	85·6	85·4	84·8	84·7
27	82·0	81·7	82·0	82·1	80·3	81·2	78·8	79·3	80·7	82·1	82·6	83·2	83·2	82·5	83·3
28	79·7	81·6	81·7	81·9	81·4	81·6	81·5	82·4	83·6	84·5	81·9	81·6	82·9	81·7	83·3
29	82·5	82·5	82·5	82·5	82·5	82·4	82·4	82·8	84·1	85·1	85·6	86·5	86·7	86·5	86·4
30	82·0	81·4	82·2	82·5	82·4	82·4	82·6	83·4	84·5	84·9	85·8	86·8	86·6	87·3	87·5
Mean .	82·5	82·3	82·2	82·0	**81·8**	81·8	81·8	82·4	83·4	84·4	85·0	85·7	**85·9**	85·9	85·9
Variation .	−1·2	−1·4	−1·5	−1·7	**−1·9**	−1·9	−1·9	−1·3	−0·3	+0·7	+1·3	+2·0	**+2·2**	+2·2	+2·2
Mean in °C. .	28·1	27·9	27·9	27·8	**27·7**	27·7	27·7	28·0	28·6	29·1	29·4	29·8	**29·9**	29·9	29·9
Variation in °C.	−0·6	−0·8	−0·8	−0·9	**−1·0**	−1·0	−1·0	−0·7	−0·1	+0·4	+0·7	+1·1	**+1·2**	+1·2	+1·2

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN DEGREES FAHRENHEIT.)

Hours. (B. M. T.)									Mean.		Maximum.		Minimum.		Date.
15--16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
88·5	87·3	85·4	84·2	83·5	82·7	82·6	82·5	82·2	84·2	29·0	14 6	89·5	5 35	80·4	1
87·5	86·5	85·0	83·6	83·2	82·6	82·5	82·3	82·2	84·2	29·0	13 7	88·8	2 58	81·3	2
88·2	87·2	85·4	84·1	83·3	82·7	82·6	82·5	82·4	84·3	29·1	13 10	88·8	6 0	80·7	3
87·9	86·8	85·5	84·1	83·3	82·7	82·5	82·3	81·6	84·2	29·0	13 23	88·7	5 25	80·6	4
88·3	87·4	85·8	84·1	83·3	82·8	82·6	82·4	82·0	83·9	28·8	14 16	89·0	5 30	79·5	5
87·7	86·7	85·2	83·7	83·2	82·7	82·6	82·4	82·2	83·7	28·7	14 14	88·8	5 50	80·2	6
87·7	87·2	85·5	84·2	83·6	83·5	83·4	83·1	83·0	84·1	28·9	13 56	89·1	5 0	80·2	7
88·3	89·2	55·4	83·7	83·2	82·6	82·5	82·4	82·4	84·7	29·3	13 20	89·7	5 0	81·5	8
87·6	86·5	85·2	84·2	83·7	83·5	83·3	82·7	82·7	84·6	29·2	12 8	89·6	4 40	81·5	9
87·9	87·0	85·8	84·7	84·4	83·8	83·4	83·2	83·0	85·0	29·4	11 58	89·4	5 15	81·9	10
89·0	87·5	86·0	84·9	84·6	84·4	84·2	83·9	83·7	85·1	29·5	14 22	90·0	3 0	82·1	11
89·5	88·4	86·6	85·2	84·5	84·1	83·8	83·6	83·5	85·4	29·7	13 30	90·5	5 0	82·5	12
88·9	87·8	86·6	85·3	84·4	84·5	84·6	84·5	84·3	85·4	29·7	13 28	90.8	4 20	81·5	13
89·5	89·0	87·9	86·4	86·2	86·0	85·6	84·7	79·5	86·0	30·0	12 55	90·6	23 27	79·2	14
86·7	86·2	86·1	84·9	84·8	84·5	84·4	83·8	84·2	83·7	28·7	14 44	88·1	2 12	78·5	15
85·2	83·2	78·6	**77.0**	77·5	77·7	78·5	79·0	79·0	82·9	28·3	11 58	89·4	18 5	**76.8**	16
83·9	83·6	83·3	83·0	82·9	82·7	82·4	80·7	80·5	82·7	28·2	10 4	87·5	0 2	79·2	17
85·4	83·7	83·8	82·7	82·1	82·0	81·9	81·2	81·3	**82.0**	**27.8**	15 40	85·9	3 30	78·6	18
86·6	85·6	84·6	83·9	83·5	83·4	83·1	82·0	82·0	83·3	28·5	15 38	87·1	5 10	79·6	19
86·9	86·6	85·8	84·5	83·6	83·5	83·2	82·9	82·6	83.4	28·6	14 52	87·5	4 0	79·5	20
88·2	87·7	86·7	85·1	84·5	83·9	83·9	83·5	83·4	84·5	29·2	14 30	88·6	5 0	81·5	21
88·5	88·1	86·6	85·0	84·5	84·0	83·6	83·5	83·3	84·9	29·4	14 10	89·0	5 50	81·5	22
89·0	87·9	86·3	85·1	84·3	83·9	83·7	83·7	83·5	85·2	29·6	13 20	89·5	5 40	82·2	23
89·0	87·7	86·5	85·2	84·8	84·5	84·2	84·0	83·8	85·1	29·5	15 15	89·2	5 42	82·1	24
88·1	87·3	86·4	85·5	84·9	84·6	84·5	84·3	84·1	85·3	29·6	14 4	89·1	4 20	82·4	25
89·3	88·6	87·5	86·1	85·5	85·1	84·8	84·5	84·5	85·6	29·8	15 30	89·5	4 55	82·1	26
90·2	89·8	88·3	86·4	85·8	85·4	85·0	84·9	84·7	**86·4**	**30·2**	14 5	**90.9**	5 30	83·5	27
89·2	87·0	86·5	85·8	85·5	85·2	85·2	85·2	85·0	86·1	30·1	12 55	90·4	5 40	83·2	28
89·4	87·8	86·4	85·8	85·5	85·5	85·3	85·2	85·0	86·0	30·0	13 20	90·5	2 28	81·9	29
89·5	88·4	87·5	86·2	85·7	85·8	84·8	84·3	83·0	86·2	30·1	14 10	90·7	23 58	82·5	30
88·4	86.1	84.0	83·0	82·1	82·0	81·8	81·9	80·8	84·4	29·1	12 52	90·8	23 30	80·2	31
88·1	87·0	85·7	84·4	83·9	83·6	83·4	83·1	82·8	84·6	29·2					Mean.
+3·5	+2·4	+1·1	—0·2	—0.7	—1·0	—1·2	—1·5	—1·8							Variation.
31·2	*30·6*	*29·8*	*29·1*	*28·8*	*28·7*	*28·6*	*28·4*	*28·2*							Mean in °C
+2·0	+1·4	+0·6	—0·1	—0·4	—0·5	—0·6	—0·8	—1·0							Variation in °C.

JUNE.

81·1	81·5	81·3	81·1	81·0	81·0	81·1	81·2	81·2	80·9	27·2	11 37	81·9	7 0	79·5	1
83·1	83·0	82·5	82·0	82·0	82·4	82·5	82·6	82·5	81·6	27·6	15 57	83·3	5 8	79·8	2
86·2	85·7	85·2	84·4	82·4	81·6	81·0	79·6	80·8	**83·1**	28·4	13 17	86·5	22 45	78·5	3
86·6	86·8	86·2	85·0	84·6	84·2	84·0	83·9	83·7	83·3	28·5	16 45	87·2	5 4	79·7	4
88·1	87·6	86·3	85·3	84·7	84·4	84·2	82·9	82·5	85·0	**29·4**	14 15	88·6	22 55	81·3	5
87·7	87·3	86·3	85·2	84·7	84·3	84·0	83·7	83·5	84·8	29·3	14 28	88·5	0 40	80·7	6
87·4	87·1	86·3	84·9	84·5	84·3	83·9	83·7	83·2	84·6	29·2	14 42	87·6	6 35	81·3	7
87·2	86·9	85·8	84·9	84·4	84·2	83·8	83·6	83·4	83·1	28·4	15 40	87·4	4 25	78·3	8
88·6	80·2	87·0	85·9	85·2	84·8	84·5	84·4	84·4	85·3	29·6	15 10	89·0	5 30	82·0	9
89·2	88·6	87·1	85·8	84·8	84·7	84·6	84·6	84·5	85·5	29·7	14 0	89·6	1 30	80·0	10
89·1	88·5	87·4	85·8	85·0	84·5	84·4	84·0	84·0	**85·8**	**29·9**	13 25	89·5	3 40	83·4	11
89·0	88·5	87·1	86·0	85·1	84·6	84·4	83·9	83·5	85.7	29.8	14 7	**89.7**	5 40	82·8	12
89·0	88·2	87·1	85·9	85·2	84·8	84·6	84·3	84·1	85·6	29.8	13 43	89·3	5 0	82·7	13
88·7	88·0	86·9	85·8	85·0	84·7	84·5	84·3	84·0	85·6	29·8	14 40	89·5	6 5	82·9	14
88·9	88·0	87·5	86·3	85·6	85·4	85·0	84·6	84·5	85·4	29·7	13 0	89·2	6 55	82·0	15
88·2	87·7	86·8	85·6	85·0	84·7	84·6	84·3	84·3	85·5	29·7	11 35	88·5	6 17	82·8	16
87·5	86·9	85·4	85·3	85·0	84·9	84·3	84·4	83·8	85·0	29·4	13 46	88·6	1 30	82·1	17
88·2	85·4	85·6	85·3	84·8	84·3	84·2	83·7	83·8	85·2	29·6	13 40	89·7	6 5	82·5	18
86·5	86·4	85·6	85·0	84·7	84·6	84·4	83·5	83·1	84·3	29·1	12 56	88·3	7 31	80·9	19
84·5	84·6	85·2	84·6	84·0	82·1	81·0	81·2	82·1	83·1	28·4	14 28	85·5	22 24	80·7	20
79·9	81·1	80·5	80·5	80·1	80·2	80·1	79.2	80·9	80·9	27·2	11 20	85·6	1 40	77·4	21
81·5	80·9	79·4	79·8	79·5	80·3	80·5	80·7	81·7	80·7	27·1	13 35	82·4	8 5	78·6	22
83·6	79·7	81·3	80·9	80·3	79·7	79·3	79·1	79·8	82·2	27·9	11 15	86·4	23 0	78·2	23
80·2	81·7	82·4	80·3	82·3	82·5	82·5	82.5	82·5	**80·6**	**27·0**	22 20	82·6	14 47	77.2	24
83·7	83·7	82·9	80·4	80·0	79·4	79·4	79·9	80·5	82·2	27·9	12 48	85·9	19 36	78·7	25
84·7	84·2	83·6	83·5	82·5	81·5	82·1	82.3	82·1	83·2	28·4	12 50	86·3	0 20	79·2	26
83·3	83·3	83·2	82·8	82·6	79·5	79·5	79·9	78·7	81·6	27·6	12 23	83·6	6 50	78·5	27
83·0	82·1	82·3	82·3	82·1	82·3	82·6	82·5	82·5	82·2	27·9	9 45	84·7	0 40	78·6	28
86·0	84·8	84·8	82·9	81·8	82·7	83·1	82·7	82·4	83·8	28 8	12 35	87·0	18 56	81·3	29
87.2	86·2	85·3	84·5	84·1	83·6	83·5	83·4	83·4	84·3	29·1	14 34	87·7	1 20	80·4	30
85·9	85·4	84·8	83·9	83·4	83·1	82·9	82·7	82·7	83·7	28·7					Mean.
+2 2	+1·7	+1·1	+0·2	—0·3	—0·6	—0·8	—1·0	—1·0							Variation.
29·9	29·7	29·3	28·8	28·6	28·4	28·3	28·2	28·2							Mean in °C.
+1·2	+1·0	+0·6	+0·1	—0·1	—0·3	—0·4	—0·5	—0·5							Variation in °C.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN DEGREES FAHRENHEIT.)

Date.	Hours. B. M. T.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	83·1	82·8	82·7	82·7	82·7	82·6	82·9	83·5	84·4	85·6	86·5	87·4	87·7	88·3	87·4
2	83·2	83·0	82·6	82·6	82·6	82·6	82·8	83·8	84·8	86·3	87·0	87·6	88·0	88·2	88·3
3	83·1	82·8	82·6	82·7	82·6	82·6	82·8	83·8	85·0	86·0	86·9	87·4	87·6	87·9	87·7
4	83·1	82·3	82·4	82·5	82·5	82·4	82·8	83·7	84·5	85·6	86·3	87·2	87·6	87·6	87·3
5	83·3	83·1	82·9	83·0	82·9	83·0	83·3	83·8	84·7	85·7	86·5	87·2	87·6	87·3	87·3
6	83·2	83·1	82·9	82·7	82·7	82·8	83·2	84·1	85·2	86·3	85·8	86·9	87·3	87·7	87·8
7	83·0	83·1	82·7	82·6	82·5	82·5	82·8	84·0	85·6	86·4	87·2	87·7	88·3	88·4	87·6
8	83·4	83·3	83·2	83·0	82·9	82·8	83·2	83·7	84·6	85·5	86·4	86·7	86·4	86·5	85·3
9	83·2	83·0	82·8	82·6	82·5	82·5	82·8	83·6	84·1	85·5	86·0	86·9	87·2	87·5	87·5
10	83·6	83·5	83·5	83·4	83·3	83·2	83·4	83·6	84·4	85·3	85·0	84·9	84·6	84·5	85·3
11	83·1	82·5	82·7	82·6	82·6	82·5	82·6	83·3	84·6	85·9	86·7	87·3	88·2	88·3	88·3
12	83·2	82·9	82·7	82·7	80·5	80·1	80·7	81·1	82·7	84·6	84·3	85·1	86·9	87·6	87·5
13	81·5	82·4	82·4	81·8	82·0	82·1	82·3	82·1	81·0	78·7	79·4	80·2	81·6	82·4	82·3
14	78·0	77·7	78·5	78·5	78·6	78·6	77·8	78·3	78·7	79·6	79·7	81·6	82·6	82·7	83·1
15	80·8	80·6	81·2	80·8	81·2	81·5	81·8	82·3	82·8	83·5	83·7	84·2	83·6	83·6	83·5
16	81·6	81·7	81·2	78·3	78·2	78·3	78·4	78·2	79·2	80·0	78·6	79·9	80·8	78·3	80·2
17	77·9	76·9	77·2	78·0	79·5	80·6	81·3	82·0	83·0	84·3	84·5	84·7	85·0	80·4	80·6
18	81·6	81·8	81·6	81·6	81·7	81·7	82·0	82·3	83·1	83·6	84·1	84·0	84·0	84·0	83·9
19	81·5	81·6	81·5	81·1	81·2	80·7	80·7	81·5	82·1	82·8	82·8	84·3	84·5	84·9	83·4
20	80·6	80·1	81·1	80·7	80·3	80·5	80·3	81·5	82·2	82·6	82·8	84·2	84·6	84·8	84·6
21	81·4	81·3	81·0	80·8	80·7	80·6	81·2	82·3	83·4	84·2	85·1	85·4	85·7	86·3	86·4
22	81·4	81·3	81·1	80·2	80·5	80·5	80·7	81·6	83·1	84·3	85·1	85·5	86·2	86·4	86·4
23	81·6	81·5	81·3	80·7	80·6	80·5	81·0	82·1	83·1	84·3	85·4	85·8	86·3	85·2	83·7
24	81·7	81·7	81·6	81·5	81·5	81·6	81·7	81·9	82·4	83·5	84·1	85·0	85·4	86·4	85·9
25	82·0	82·1	82·0	81·5	79·2	79·7	81·2	81·7	82·2	78·7	80·0	81·5	82·6	84·3	84·3
26	80·7	80·3	81·3	81·3	80·4	80·5	80·4	81·5	81·8	82·5	82·3	83·1	83.4	82·4	82·6
27	80·6	80·5	80·9	80·3	80·3	79·5	79·2	78·9	77·3	77·5	79·3	80·0	81·2	82·5	82·7
28	80·6	79·4	78·3	78·9	78·4	78·3	79·4	79·4	79·6	80·8	81·2	82·0	81·3	81·9	80·8
29	81·2	79·9	79.8	79·0	78·8	79·6	80·0	80·1	81·2	81·6	81·0	81·4	82·7	82·3	81·5
30	79·7	79·8	79·8	78·9	78·6	79·2	78·3	77·8	77.8	77·5	77·3	77·4	78·5	78·7	79·2
31	77·5	77·6	77·1	76·6	76·3	75·9	75·2	75·4	75·4	76·7	76·4	76.4	76·7	77·2	76·8
Mean . .	81·6	81·4	81·4	81·1	80·9	81·0	81·2	81·7	82·4	83·1	83·5	84·2	84·6	84·7	84·5
Variation. .	—1·0	—1·2	—1·2	—1·5	—1·7	—1·6	—1·4	—0·9	—0·2	+0·5	+0·9	+1·6	+2·0	+2·1	+1·9
Mean in °C .	27.6	27·4	27·4	27·3	27·2	27·2	27·3	27·6	28·0	28·4	28·6	29·0	29·2	29·3	29·2
Variation in °C .	—0·5	—0·7	—0·7	—0·8	—0·9	—0·9	—0·8	—0·5	—0·1	+0·3	+0·5	+0·9	+1·1	+1·2	+1·1

AUGUST.

1	76·6	76·3	76·2	75·6	75·8	76·9	76·7	78·0	78·6	79·2	79·3	79·7	77·4	79·3	78·2
2	77·3	76·6	76·9	76·5	76·8	76·9	77·4	77·6	78·0	77·0	77·4	77·0	77·5	76·5	76·5
3	79·3	79·4	79·3	79·2	78·5	78·3	78·7	79·1	79·5	79·8	80·0	80·2	79·9	80·4	79·7
4	79·2	79·1	79·4	78·7	79·2	78·7	78·8	77·6	76·5	76·9	77·2	77·2	77·0	76·7	77·3
5	77·4	77·5	77·7	76·9	77·0	77·3	76·3	76·9	77·2	77·8	78·0	78·6	79·3	80·0	79·3
6	78·3	78·4	78·4	77·9	77·9	78·1	78·4	79·4	79·6	80·3	81·3	80·2	81·4	80·5	81·7
7	79·3	79·5	79·4	79·4	79·3	78·7	79·1	79·6	80.4	81·2	82·1	82·4	83·4	82·2	83·2
8	79·3	79·1	79·1	78·6	78·7	78·8	78·9	79·8	79·6	81·2	81·8	82·7	82·2	81·3	82·2
9	79·0	78·6	78·5	77·6	77·7	77·4	77·2	76·2	76·5	77·1	78·5	80·2	77·6	77·3	80·5
10	79·4	79·3	79·3	79·0	79·0	78·6	79·3	79·5	80·3	81·2	82·2	82·4	82·0	81·5	81·2
11	78·7	78·9	78·6	78·3	78·6	78·1	78·3	79·2	79·8	80·5	81.0	81·6	82·2	83·0	82·6
12	79·7	79·7	79·6	79·6	79·6	79·7	79·8	80·3	81·6	82·3	83·2	83·8	84·4	84·3	84·2
13	78·6	78·8	79·4	79·5	79·1	78·1	79·2	79·7	80·8	82·2	83·3	82·2	81·3	81·8	83·3
14	78·4	79 2	79·3	79·3	79·4	79·4	79·7	80·2	81·2	81·6	82·3	83·3	83·9	83·6	82·1
15	79·6	79·5	78·8	78·9	79·0	79·3	79·5	79·7	80·7	81·3	82·7	82·8	83·2	82·7	82·7
16	80·2	79·9	79·7	79·5	79·5	79·6	79·9	80·4	78·7	77·3	77·5	78·4	81·5	81·7	82·1
17	79·7	79·7	79·6	79·5	79·5	79·5	79·7	80·2	81·1	82·4	83·4	83·7	82·7	84·2	84·2
18	80·2	79·8	79·7	79·7	79·4	78·7	78·5	79·7	81·0	81·8	82·7	83·7	84·3	84·5	84·5
19	79·7	79·4	79·3	78·8	78·5	78·5	79·1	79·4	79·7	80·0	81·9	83·3	84·2	84·6	84·5
20	79·6	79·5	79·5	79·4	79·4	79·6	79·8	80·8	81·6	82·8	84·0	84·6	85·2	85·3	85·4
21	80·6	80·7	80·6	80·5	80·2	80·1	80·3	79·8	80·5	80·6	81·6	82·2	81·3	82.3	83·3
22	79·8	79·6	79·2	79·3	79·5	79·3	79·4	79·7	81·2	82·3	83·7	84·9	85·6	86·2	85·2
23	81·1	80·2	80·2	80·2	79·3	79·0	79·7	80·7	82·7	83·8	84·8	84·5	85·1	85·6	86·3
24	81·7	81·6	81·0	80·5	80·5	80·4	80·6	81·2	82·3	84·3	85·0	84·7	85·3	85·4	85·0
25	81·8	81·5	79·9	79·0	79·5	79·7	80·0	80·4	80·2	80·2	78·6	78·5	78·2	78·1	77·3
26	78·6	79·0	78·3	78·2	79·3	79·5	79·6	79·7	80·4	82·3	83·3	83·5	84·2	84·5	84·0
27	80·2	78·6	79·7	80·0	79·6	79·4	79·6	80·5	82·2	83·2	83·5	83·7	84·7	84·1	84·3
28	80·4	80·3	80·1	80·0	79·8	79·8	80·3	80·4	81·3	82·3	83·1	84·0	85·1	85·1	85·3
29	80·6	80·4	79·9	79·6	79·7	79·5	79·7	80·8	82·0	83·3	83·7	84·7	85·1	85·6	85·5
30	79·6	79·5	79·4	78·5	78·4	78·5	78·9	79·7	81·6	83·3	84·4	84·7	84·9	85·4	85·5
31	80·4	80·2	80·1	79·7	80·1	79·4	79·0	79·9	82·3	83·3	84·5	84·7	84·9	85·5	85·3
Mean . .	79·5	79·3	79·2	78·9	79·0	78·8	79·1	79·6	80·3	81·1	81·8	82·2	82·4	82·6	82·7
Variation. .	—1·1	—1·3	—1·4	—1·7	—1·6	—1·8	—1·5	—1·0	—0·3	+0·5	+1·2	+1·6	+1·8	+2·0	+2·1
Mean in °C .	26·4	26·3	26·2	26·1	26·1	26·0	26·2	26·4	26·8	27·3	27·7	27·9	28·0	28·1	28·2
Variation in °C.	—0·6	—0·7	—0·8	—0·9	—0·9	—1·0	—0·8	—0·6	—0·2	+0·3	+0·7	+0·9	+1·0	+1·1	+1·2

(Averages for periods of sixty minutes from full hour to full of local mean time.)

JULY. (IN DEGREES FAHRENHEIT.)

Hours (B. M. T.).									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
87·7	87·0	86·1	84·7	84·3	84·0	83·5	83·4	83·2	84·8	29·3	13 30	88·6	4 45	82·5	1
88·0	86·7	86·1	84·7	84·3	84·0	83·7	83·5	83·4	**84·9**	**29·4**	14 34	88·6	5 32	82·4	2
87·7	86·6	85·8	84·8	84·3	84·0	83·7	83·5	83·5	84·8	29·3	13 47	88·2	4 56	82·5	3
86·7	86·0	85·2	84·6	84·2	84·1	83·9	83·7	83·3	84·6	29·2	14 12	88·3	1 18	81·8	4
86·9	85·6	83·9	84·0	83·9	84·0	83·6	83·5	83·3	84 6	29·2	12 34	87·7	23 47	82·6	5
88·0	87·3	86·3	85·0	84·4	84·3	84·0	83·6	83·5	84·9	29·4	13 45	88·3	4 14	82·5	6
87·1	86·4	85·4	84·7	84·3	84·3	83.7	83·6	83·5	84·9	29·4	13 8	**89·4**	5 28	82·4	7
83·2	83·6	83·5	83·3	83·4	83·5	83·5	83·3	83·3	84·1	28·9	11 2	87·2	15 20	82·5	8
86·7	86·2	85·5	84·7	84·4	84·2	83·9	83·7	83·7	84·6	29·2	13 42	87·7	5 48	82·4	9
85·5	85·1	84·6	84·2	83·9	83·2	83·4	83·4	83·2	84·1	28·9	15 40	85·7	20 26	82·8	10
87·8	86·8	86·2	84·7	83·6	83·7	83·5	83·5	83·4	84·8	29·3	12 17	88·5	1 4	82·3	11
87·1	84·7	84·1	83·6	83·3	82·8	83·0	83·4	83·1	83·7	28.7	13 22	88·0	5 50	79·5	12
83·8	83·7	83·6	83·0	82·8	82·5	81·5	79·7	78·7	81·7	27·6	16 15	85·0	9 20	78.3	13
81·2	81·9	82·6	82·2	81·8	81·9	81·4	79·3	80·6	80·3	26·8	14 20	83·4	6 10	77·3	14
83·5	83·5	83·4	83·0	82·6	82·7	82·6	81·8	81·5	82·5	28·1	12 17	85·4	3 33	80·0	15
79·7	78·9	78·9	81·2	81·6	81·7	82·1	79·9	79·4	79·8	26·6	21 47	82·2	16 40	77·5	16
82·6	82·7	82·9	82·9	82·8	82·7	82·6	82·3	82·2	81·7	27·6	12 20	85·5	1 16	76·5	17
84·0	83·6	83·3	82·6	81·3	81·9	82·2	80·7	81·5	82·6	28·1	13 28	84·4	22 15	80·3	18
84·0	83·4	82·9	82·7	82·6	81·6	82·1	81.6	81·5	82·4	28·0	13 35	85·1	6 36	80·4	19
84·4	83·6	82·3	82·2	82·0	81·9	81·8	81·7	81·6	82·2	27·9	13 50	85·4	6 0	78·5	20
86 0	85·2	84·5	83·3	82·6	82·1	81·8	81·6	81·5	83·1	28·4	14 10	86·8	5 36	80·5	21
86·5	86 2	85·1	83·7	83·0	82·6	82·4	82·0	81·8	83·2	28·4	15 50	86·7	3 20	79·6	22
84·3	85·0	84·4	82·9	82·6	82·5	82·4	82·4	82·3	83·0	28·3	13 11	86·7	2 52	80·4	23
83·8	82·8	83·8	83·1	81·5	81·6	81·7	81·6	81·4	82·8	28·2	14 32	86·6	7 50	80·5	24
83·7	83·2	82·6	80·9	81·1	81·0	81·4	81·3	80·8	81·6	27·6	13 45	84·7	9 53	76·4	25
82·7	82·5	82·4	82·0	81·3	81·3	81·6	81·1	80·9	81·7	27·6	13 20	84·0	0 49	78·5	26
82·3	81·5	81·4	81·5	81·3	81·2	81·3	81·0	81·2	80·6	27·0	14 16	83·0	6 56	76·6	27
81·7	82·1	81·6	81·6	81·4	81·4	81·5	81·5	81·5	80·6	27·0	12 15	82·9	4 18	77·2	28
80·7	79·3	79·1	79·3	79·3	79·5	79·0	79·5	79·6	80·2	26·8	12 40	83·2	21 25	77 9	29
78·6	79·2	79·1	78·6	78·5	78·3	78·2	78·0	77·8	78·5	25·8	2 20	80·0	10 56	76·5	30
76·6	77·6	78·3	77·2	77·2	78·0	77·5	77·4	77·5	**76·9**	**24 9**	18 21	78·6	6 15	**74·6**	31
84·3	83·8	83·4	82·8	82·4	82·3	82·2	81·8	81·7	82·6	28·1					Mean.
+1·7	+1 2	+0.8	+0·2	—0·2	—0·3	- 0·4	—0·8	—0·9							Variation.
29·1	·8	28·6	28·2	28·0	27·9	27.9	27·7	27·6							Mean in °C.
+1.0	+0·7	+0·5	+0·1	—0·1	—0·2	—0·2	—0·4	—0·5							Variation in °C.

AUGUST.

77·4	77·9	78·2	77·6	78·3	78·1	77·3	77·6	77·9	77·7	25·4	11 45	80·2	4 8	**74·8**	1
76·8	77·6	78·3	77·3	77·8	77·7	77·2	78·5	79 2	**77 3**	**25·2**	23 40	79·4	3 8	75·5	2
79·7	78·2	77·7	77·5	78·4	**79·3**	79·3	79·5	79·5	79·2	26·2	13 20	81·3	18 34	76·5	3
77·4	77·9	77·4	77·9	78·2	78·1	78·2	77·8	77·1	77·9	25·5	3 2	79·6	8 20	76·3	4
78·7	79·4	79·4	79·1	78·4	78·0	78·4	78·3	78·6	78·1	25·6	13 24	81·0	6 40	75·5	5
82·1	82·1	80·8	80·4	80·0	79·8	79·6	79·4	79·6	79·8	26·6	16 7	82·4	3 10	77·2	6
82·2	80·7	80·6	79·8	79·5	79·6	79·5	79·5	78·7	80·4	26·9	12 29	83·7	5 8	77·8	7
79·9	81·0	80·7	79·9	79·4	79·7	79·7	79·3	79·1	80·1	26·7	11 5	83·0	3 9	78·3	8
81·8	81·6	80·2	79·6	79·5	79·4	79·5	79·6	79·5	78·8	26·0	15 22	82·4	7 50	75·4	9
80·4	79·5	79·5	79·3	79·1	79·1	79·2	79·2	79·3	79·9	26·6	10 43	82·6	5 4	78.0	10
82·4	82·2	81·4	80·6	80·4	80·4	80·2	79·6	79·6	80·3	26·8	15 10	83·5	5 35	78·0	11
82·6	82·8	82·2	80·5	80·5	79·6	78·6	78·2	78·6	81·1	27·3	12 50	84·7	21 55	78·2	12
83·5	82·8	82·1	81·2	80·7	80·4	80·2	80·3	79·7	80·8	27·1	15 22	84·0	5 45	77·9	13
82·3	81·6	81·4	80·9	80·5	80·3	80·0	79·8	79·5	80·8	27·1	13 32	84·1	0 20	77·8	14
82·9	82·7	81·9	81·3	81·1	80·7	80·7	80·5	80·4	80·9	27·2	12 35	83·5	2 40	78·1	15
82·4	81·6	81·2	80·8	80·5	80·2	80·1	79·9	79·8	80·1	26·7	15 10	82·6	9 22	76·9	16
84·3	83·6	82·7	81·5	81·0	80·6	80·5	80·4	80·5	81·4	27·4	11 52	84·6	3 30	79·4	17
84·7	83·7	82·7	81·6	80·8	80·5	80·4	80·2	80·1	81·3	27·4	15 42	84·9	5 26	77·6	18
84·4	83·2	82·5	81·5	80·8	80·5	80·4	79·9	79·7	81·0	27·2	13 47	84·8	5 2	78·3	19
85·3	84·7	83·3	82·3	81·6	81·4	81·2	81·3	80·7	82·0	27·8	14 40	85·8	3 22	78·9	20
83·3	83·4	82·6	81·7	81·1	80·6	80·5	80·4	79·8	81·2	27·3	16 33	83·9	23 55	79·5	21
83·7	83·7	83·3	82·6	82·4	82·2	82·3	81·6	81.2	82·0	27·8	13 20	**86·5**	4 0	79·2	22
85·6	84·9	83.8	83·3	82·9	82·8	82·5	82·3	82.2	82·6	28·1	14 15	86·5	5 25	78·7	23
85·3	84·6	83·8	83·2	82·5	82·5	82·4	82·2	82·3	**82·8**	**28·2**	13 22	85·6	5 55	80·3	24
77·3	77·4	77·3	77·4	77·7	78·1	78·2	78·7	78·6	78·9	26·1	0 10	82·3	14 51	76·7	25
84·2	83·5	82·7	81·6	81·3	81·3	81·2	80·7	80·8	81·3	27·4	13 40	84·9	3· 0	78·0	26
84·2	82·3	81·6	81·2	81·0	81·0	80·8	80·5	80·5	81·5	27·5	12 44	85·5	1 12	78·4	27
85·3	84·3	82·7	81·8	81·3	81·2	80·9	80·7	80.8	81·9	27·7	14 57	85·7	7 46	79·6	28
85·6	84·5	83·2	81·6	81·3	81·0	80·6	80·5	80·3	82·0	27·8	15 38	85·7	5 50	79·4	29
85·6	84·9	83·×	82·7	82·3	81·7	81·5	81·3	80.7	81·9	27·7	13 12	85·7	3 50	78·1	30
85·1	84·4	82·9	82·1	81·6	81·5	81·4	80·8	80·7	82·1	27·8	12 57	85·8	6 31	78·6	31
82·5	82·0	81·4	80·6	80·4	80·2	80·1	80·0	79·8	80·6	27·0					Mean.
+1·9	+1·4	+0·8	0·0	—0·2	—0·4	—0·5	—0·6	—0·8							Variation.
28·1	27·8	27·4	27·0	26·9	26·8	26·7	26·7	26·6							Mean in °C.
+1·1	+0·8	+0·4	0·0	—0·1	—0·2	—0·3	—0·3	—0·4							Variation in °C.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN DEGREES FAHRENHEIT.)

Date.	Hours (B. M. T.) 0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	80·3	80·2	79·8	79·4	79·6	79·0	79·2	80·8	81·6	83·4	84·4	85·2	86·0	86·1	84·8
2	80·6	80·4	80·0	79·9	79·9	79·6	80·2	81·0	82·5	83·5	84·6	85·1	85·5	86·2	85·9
3	80·5	79·6	79·4	79·4	79·2	79·5	79·6	80·3	81·7	83·3	84·4	84·6	85·4	86·2	85·8
4	80·6	80·0	79·6	79·4	79·4	79·6	79·7	80·3	81·8	83·2	84·2	84·3	85·4	85·9	86·4
5	79·6	79·6	79·5	79·6	79·7	79·6	79·7	80·2	80·9	81·6	82·1	83·2	85·3	85·1	82·4
6	77·2	76·7	76·5	76·4	76·4	76·1	76·2	77·3	79·3	80·7	82·3	82·3	83·6	84·5	84·4
7	78·8	78·7	78·6	78·8	79·2	79·3	79·3	79·9	80·6	82·2	82·6	83·7	83·4	84·5	83·8
8	77·3	77·2	77·1	77·1	77·4	77·4	77·7	79·2	80·3	81·2	81·7	82·4	83·3	84·3	84·0
9	77·7	77·6	77·6	77·7	78·2	78·1	78·4	78·6	79·2	80·4	81·3	81·4	82·6	80·6	80·2
10	77·2	77·2	77·2	77·4	77·3	77·5	77·6	77·8	79·3	79·8	80·3	81·2	81·5	81·6	81·7
11	79·4	79·2	79·1	79·0	78·9	78·3	78·5	78·6	78·2	78·0	77·6	77·8	79·2	79·0	78·8
12	78·5	78·3	77·6	77·4	77·3	77·2	77·4	77·5	77·7	78·4	79·5	80·5	81·6	81·3	79·8
13	77·8	77·5	77·6	77·8	78·4	78·3	77·7	78·5	80·2	80·2	81·6	81·7	82·5	82·7	82·1
14	78·6	78·4	78·2	78·4	78·5	78·5	78·6	78·7	79·4	79·7	81·2	80·9	81·2	82·2	80·8
15	78·2	78·6	77·7	78·4	78·6	79·1	79·3	79·3	79·3	79·0	79·4	80·3	80·3	80·4	80·2
16	78·4	78·1	78·6	79·1	78·9	79·0	79·2	79·1	80·6	81·3	81·2	81·4	81·4	82·3	82·6
17	78·9	79·6	79·6	79·7	79·4	78·0	78·3	79·2	79·2	79·2	79·2	79·5	79·3	79·5	79·1
18	78·7	78·7	79·0	78·2	78·9	79·3	79·1	79·2	79·1	79·8	80·0	80·3	81·2	80·8	80·3
19	79·2	79·2	79·0	79·0	78·8	78·6	78·9	79·8	81·0	82·1	82·8	83·4	83·3	83·7	84·2
20	79·8	79·6	79·2	79·1	79·0	79·0	78·9	80·1	81·3	82·4	83·5	83·7	84·3	84·2	84·5
21	79·8	79·8	79·5	79·5	79·0	79·0	79·1	79·6	80·9	82·2	83·3	83·8	84·0	82·2	82·2
22	79·1	79·1	78·8	79·0	78·5	78·3	78·0	78·8	80·3	81·7	82·5	83·4	84·3	84·7	84·3
23	79·4	79·1	78·9	78·6	78·5	78·5	79·0	80·2	81·7	82·8	83·5	84·1	84·6	84·9	84·7
24	80·0	80·0	79·7	79·6	79·6	79·6	79·7	80·2	81·6	82·7	83·2	84·2	84·6	84·2	84·6
25	78·9	78·7	79·0	79·1	79·0	78·3	78·6	79·2	80·8	81·8	83·0	83·4	84·1	84·2	84·5
26	77·4	77·1	77·3	77·0	76·8	77·5	77·4	78·4	79·5	80·6	82·1	82·8	83·3	83·6	84·3
27	77·8	77·4	77·3	77·5	77·2	77·1	77·2	78·3	79·9	81·2	82·5	83·5	84·2	84·6	84·9
28	78·6	78·1	78·0	78·0	77·6	77·5	77·6	78·9	80·7	82·2	83·5	84·3	84·6	85·0	84·9
29	80·4	80·0	79·4	79·0	78·6	78·1	77·8	79·5	82·3	83·8	85·4	87·0	87·5	87·5	87·3
30	80·4	78·9	76·5	76·4	76·4	77·1	78·5	78·5	79·0	80·8	82·3	83·5	84·7	87·6	87·4
Mean .	79·0	78·8	78·5	78·5	78·5	78.4	78·5	79·2	80·3	81·3	82·2	82·8	83·4	83·7	83·4
Variation .	—1·5	—1·7	—2·0	—2·0	—2·0	—2·1	—2·0	—1·3	—0·2	+0·8	+1·7	+2·3	+2·9	+3·2	+2·9
Mean in °C .	26·1	26·0	25·8	25·8	25·8	25·8	25·8	26·2	26·8	27·4	27·9	28·2	28·6	28·7	28·6
Variation in °C	—0·8	—0·9	—1·1	—1·1	—1·1	—1·1	—1·1	—0·7	—0·1	+0·5	+1·0	+1·3	+1·7	+1·8	+1·7

OCTOBER.

1	79·5	79·6	79·0	79·0	78·8	78·8	77·7	79·0	80·2	81·3	83·0	84·3	84·6	85·5	86·4
2	79·5	79·3	79·1	77·7	77·6	76·9	78·0	79·7	80·9	82·4	83·7	84·5	85·2	85·8	85·9
3	78·9	78·5	78·7	78·7	78·5	78·0	78·3	80·0	81·2	82·4	83·7	84·8	85·7	86·5	86·5
4	79·8	79·7	79·3	78·8	78·5	77·8	78·3	79·2	80·1	81·7	83·0	83·8	84·9	86·0	86·0
5	81·0	81·0	80·5	80·2	80·1	79·7	79·9	81·2	82·9	84·2	85·4	86·1	86·5	86·9	86·6
6	79·0	79·0	78·5	78·1	77·6	77·7	78·1	80·1	81·6	83·3	85·1	86·7	86·9	87·5	87·5
7	77·6	77·5	77·3	78·0	77·8	77·7	77·6	79·4	81·5	82·6	84·3	85·9	87·3	88·1	88·0
8	81·2	80·8	80·5	79·9	79·3	79·4	80·0	81·2	82·7	84·0	85·5	86·3	86·9	87·3	87·4
9	80·3	80·2	80·5	80·0	79·6	79·6	79·4	80·0	81·0	83·0	86·5	87·2	88·0	87·5	87·9
10	81·5	81·1	80·2	80·0	80·3	80·0	80·3	81·7	83·0	83·9	85·7	87·0	88·5	88·4	88·3
11	81·5	81·5	81·2	81·1	81·0	80·5	80·3	81·4	83·0	84·4	85·9	86·8	88·2	89·7	90·2
12	81·2	81·1	81·4	81·0	80·9	80·6	80·5	81·1	82·7	84·1	85·4	87·0	89·5	91·0	89·0
13	83·1	82·8	82·1	81·6	81·7	81·4	81·5	82·7	84·0	85·2	86·3	86·8	88·2	89·9	89·0
14	83·7	83·2	82·6	82·3	82·0	81·6	81·5	82·8	84·2	85·0	85·6	86·0	86·8	87·4	88·0
15	78·9	79·0	79·0	79·4	80·0	79·9	80·0	80·3	80·8	81·9	84·0	85·8	86·7	87·2	86·7
16	81·4	80·9	80·3	80·3	80·1	79·9	80·2	81·3	82·2	83·5	84·4	85·0	85·5	86·2	86·8
17	80·2	80·3	79·6	79·5	78·7	78·2	77·8	80·2	81·3	82·5	83·7	84·5	85·4	86·5	86·7
18	79·4	79·7	79·5	78·5	78·3	77·2	76·7	79·1	80·8	82·1	83·3	84·5	84·7	86·1	86·6
19	81·2	80·5	79·7	79·3	79·0	79·1	79·9	82·3	83·5	84·5	85·4	86·3	87·0	87·3	87·2
20	82·5	82·5	82·2	82·0	81·7	81·8	81·2	80·3	80·4	79·2	80·2	81·2	83·2	84·1	84·0
21	79·4	79·2	79·1	78·6	78·2	77·5	77·2	76·6	76·9	78·1	79·1	79·2	79·7	80·2	79·8
22	78·2	78·0	78·4	78·4	77·9	77·5	77·2	76·1	76·6	77·9	79·5	80·6	81·8	82·3	82·8
23	78·3	78·4	78·5	78·4	78·4	78·0	78·2	78·6	80·6	82·0	81·6	83·4	83·5	84·2	84·0
24	77·8	77·5	77·4	77·2	76·7	76·5	76·8	78·2	80·8	82·3	83·4	84·5	85·3	85·7	85·7
25	79·8	79·0	78·2	77·6	77·2	76·9	77·2	79·5	81·0	82·4	84·0	85·8	87·4	88·4	87·9
26	79·0	78·3	78·3	77·6	77·1	77·0	77·9	79·6	81·1	82·4	84·2	85·8	87·1	88 5	88·4
27	79·0	78·1	78·2	77·6	76·9	76·2	76·2	78·1	80·6	83·2	85·4	86·9	87·5	88·5	88·5
28	78·9	78·2	78·1	77·9	77·5	76·7	75·7	77·1	80·2	82·4	83·9	85·7	87·1	87·2	87·2
29	78·2	78·0	77·9	78·0	77·9	77·4	77 6	78·8	80·0	81·4	82·8	84·7	87·1	88·4	89·1
30	77·4	76·5	76·2	76·2	75·8	76·1	76·7	78·2	79·9	81·2	83·3	85·1	87·2	88·4	88·0
31	78·0	76·6	76·9	76·5	76·2	76·0	76·0	77·2	79·6	81·3	83·7	86·1	88·4	90·0	89·2
Mean .	79·9	79·5	79·3	79·0	78·8	78·4	78·5	79·7	81·1	82·4	83·9	85·1	86·2	87·0	86·9
Variation .	—2·2	—2·6	—2·8	—3·1	—3.3	—3·7	—3·6	—2·4	—1.0	+0·3	+1·8	+3·0	+4·1	+4·9	+4·8
Mean in °C .	26·6	26·4	26·3	26 1	26·0	25·8	25·8	26·5	27·3	28.0	28·8	29·5	30.1	30·6	30·5
Variation in °C	—1·2	—1·4	—1·5	—1·7	—1·8	—2·0	—2·0	—1·3	—0·5	+0·2	+1·0	+1·7	+2·3	+2·8	+2.7

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN DEGREES FAHRENHEIT.)

Hours (B. M. T.)									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
84·2	84·6	83·2	82·4	81·7	81·5	81·2	80·6	80·6	82·1	27·8	12 56	86·6	6 0	78·5	1
85·0	84·3	82·9	82·0	81·6	81·5	81·3	81·1	80·7	82·3	27·9	14 20	86·3	5 55	79·5	2
85·6	84·7	83·7	82·6	81·9	81·5	81·6	81·5	81·4	82·2	27·9	13 10	86·5	4 57	78·7	3
85·3	84·0	83·5	81·9	81·2	81·1	80·5	79·8	79·7	81·9	27·7	14 3	86·7	6 20	78·7	4
80·8	79·4	79·2	78·7	77·9	77·7	77·8	78·2	77·6	80·2	26·8	12 40	86·7	23 55	77·4	5
83·7	82·2	78·0	77·9	78·4	79·0	79·4	79·5	79·4	79·5	26·4	14 54	85·2	5 40	**75·8**	6
82·2	78·4	80·2	79·4	78·6	78·5	78·3	78·2	77·6	80·2	26·8	13 34	84·6	23 55	77·4	7
81·9	80·0	78·0	78·4	78·6	78·8	77·8	77·8	77·6	79·4	26·3	13 27	84·6	3 0	76·8	8
79 4	78·5	77·7	77·8	78·3	78·6	78·6	78·2	77·6	78·9	26·1	12 40	83·3	2 57	77·4	9
81·6	81·6	80·9	79·7	79·8	79·7	79·7	79·6	79·2	79·4	26·3	13 30	82·1	2 23	76·9	10
78·3	77·9	78·4	78·6	78·5	78·1	78·6	79·2	78·5	78·6	25·9	13 19	79·6	10 54	77·3	11
78·6	78·2	77·6	78·0	78·3	77·8	78·5	78·3	78·3	**78·5**	**25·8**	12 30	82·0	5 25	77·1	12
81·7	81·4	79·8	79·2	79·5	79·3	79·1	79·1	78·7	79·7	26·5	13 6	83·3	1 15	77·2	13
81·4	81·2	80·0	79·7	79·5	79·5	79·5	79·6	79·2	79·7	26·5	14 0	82·6	2 57	78·0	14
80·5	80·5	80·3	80·0	79·9	79·2	79·3	79·4	78·9	79·4	26·3	12 25	80·7	2 6	77·0	15
82·4	81·2	80·5	80·5	80·4	80·2	79·6	79·8	79·4	80·2	26·8	14 0	83·0	1 28	77·5	16
78·5	78·8	79·2	79·5	79·6	79·7	79·4	79·6	78·6	79·2	26·2	14 7	80·0	3 32	77·5	17
80·3	80·6	80·0	80·0	80·0	79·4	79·5	79·5	79·2	79·6	26·4	12 10	81·5	8 4	78·0	18
83·0	83·2	82·0	80·9	80·5	80·4	80·2	80·0	80·1	81·0	27·2	14 5	84·5	4 55	78·5	19
83·7	83·0	81·8	81·2	80·9	80·5	80·5	80·2	80·0	81·3	27 4	14 28	84·6	5 57	78·6	20
82·7	82·4	81·2	80·2	79·7	79·5	79·6	79·5	79·4	80·8	27·1	13 0	84·3	6 0	78·8	21
83·9	83·0	81·8	80·9	80·4	80·1	79·9	79·5	79·4	80·8	27·1	13 40	85·1	6 0	77·7	22
84·6	83·6	82·5	81·2	80·6	80·3	80·2	80·2	80·0	81·3	27·4	13 38	85·3	4 30	78·4	23
83·4	81·8	81·3	80·6	80·4	80·0	80·0	80·0	79·6	81·3	27·4	12 20	85·1	5 34	79·4	24
84·3	83·4	81·8	80·4	79·8	79·3	78·5	77·7	77·6	80·6	27·0	14 35	84·7	5 12	78·2	25
84·4	83·6	82·0	80·5	80·0	79·6	79·4	79·2	78·4	80·1	26·7	15 12	84·6	4 32	76·5	26
84·6	83·8	82·2	81·3	80·9	80·5	80·2	80·0	79·4	80·6	27·0	14 47	85·5	4 45	77·0	27
84·7	83·8	82·6	81·8	81·4	81·2	81·2	80·8	80·5	81·1	27·3	12 51	85·5	5 40	77·4	28
86·7	86·2	84·8	84·2	84·1	82·1	81·6	80·5	80·6	**82·7**	**28·2**	13 4	88·0	6 8	77·5	29
86·6	85·6	84·3	83·4	82·2	81·3	79·6	79·6	79·8	81·3	27·4	14 0	**88·7**	3 42	76·2	30
82·8	82·0	81·0	80·4	80·2	79·9	79·7	79·5	79·2	80·5	26·9					Mean.
+2·3	+1·5	+0·5	—0·1	—0·3	—0·6	—0·8	—1·0	—1·3							Variation.
28·2	27·8	27·2	26·9	26·8	26·6	26·5	26·4	26·2							Mean in °C.
+1·3	+0·9	+0·3	0·0	—0·1	—0·3	—0·4	—0·5	—0·7							Variation in °C.

OCTOBER.

86·4	86·3	82·8	80·7	80·2	80·0	80·0	80·0	79·6	81·4	27·4	16 23	87·4	6 40	77·2	1
84·5	83·5	81·2	80·3	79·8	79·6	79·4	79·1	79·2	80·9	27·2	13 48	86·3	5 50	76·8	2
87·0	85·2	83·0	80·2	80·0	79·6	79·6	79·9	80·0	81·5	27·5	15 40	87·3	5 55	77·7	3
85·7	85·2	84·1	82·8	82·5	82·0	81·9	81·6	81·2	81·8	27·7	14 30	86·4	5 50	77·6	4
84·7	83·8	80·3	78·1	78·5	78·5	79·0	79·0	78·7	81·8	27·7	13 23	87·2	18 10	77·4	5
87·1	85·3	77·7	**75·5**	75·5	76·0	76·6	77·3	77·5	80·6	27·0	13 38	88·2	18 40	**75·4**	6
87·6	87·1	86·1	84·5	83·5	82·6	82·4	81·8	81·6	82·4	28·0	13 15	88·8	2 30	77·2	7
87·5	86·8	85·3	84·6	84·2	83·6	83·5	82·5	80·0	83·3	28·5	15 15	87·7	6 40	79·2	8
88·0	87·0	85·2	84·2	83·8	83·2	83·2	82·9	82·0	83·3	28·5	14 40	88·5	7 2	79·3	9
88·2	87·2	83·7	79·0	80·3	80·5	80·9	81·5	81·7	83·0	28·3	13 15	88·7	18 2	78·3	10
88·9	87·9	86·1	84·8	84·6	84·0	83·7	82·9	81·9	84·2	29·0	14 30	90·6	6 40	80·0	11
88·7	87·4	86·1	85·5	85·0	84·5	83·9	83·0	82·6	84·3	29·1	13 40	**91·6**	6 40	80·3	12
88·5	87·3	86·0	85·1	84·7	84·6	84·2	83·4	83·0	**84·7**	**29·3**	13 52	90·0	4 2	81·2	13
88·0	87·0	86·0	85·4	85·2	84·7	84·2	81·2	79·0	84·3	29·1	14 50	88·4	23 58	78·8	14
87·1	85·3	81·8	81·5	81·2	81·7	81·6	81·5	81·3	82·2	27·9	13 15	87·5	0 40	78·7	15
86·6	86·3	84·7	84·2	84·1	83·2	81·9	80·8	80·7	82·9	28·3	14 15	87·0	5 40	79·8	16
86·4	85·3	83·8	83·0	82·7	82·5	81·7	80·2	79·6	82·1	27·8	14 8	87·2	6 35	77·5	17
86·6	86·1	84·2	83·8	83·6	83·4	83·1	82·4	82·1	82·2	27·9	15 4	87·1	6 20	76·5	18
86·6	85·3	84·3	83·5	83·2	83·0	82·9	82·6	82·7	83·2	28·4	13 0	87·5	5 0	78·7	19
82·6	82·7	81·7	81·5	81·0	81·1	80·5	80·5	79·9	81·6	27·6	14 3	84·6	9 55	78·4	20
79·8	79·8	79·7	79·5	79·6	79·4	78·9	78·5	78·4	**78·9**	**26·1**	12 50	80·7	7 20	76·4	21
82·9	82·2	81·4	80·8	80·5	79·8	78·4	78·5	78·5	79·4	26·3	15 0	83·4	7 25	76·0	22
83·4	82·0	80·8	80·4	80·1	79·7	79·5	78·8	78·3	80·4	26·9	13 45	84·5	5 20	77·8	23
85·5	84·7	83·1	82·4	82·4	82·3	82·3	82·0	80·8	81·3	27·4	13 4	86·4	4 50	76·4	24
87·5	86·0	84·3	83·5	83·4	82 8	81·6	80·0	79·3	82·1	27·8	13 50	88·7	6 20	76·5	25
88·4	86·8	84·3	83·3	82·7	82·2	81·1	80·2	79·9	82·1	27·8	14 10	89·4	5 38	76·6	26
88·4	86·8	84·9	83·8	82·9	82·0	81·4	79·9	79·6	82·1	27·8	13 32	88·7	5 28	75·7	27
86·9	85·5	83·9	83·1	82·7	82·4	81·3	80·0	79·1	81·6	27·6	14 30	87·5	6 30	75·4	28
88·0	85·2	83·0	82·4	82·0	81·2	80·3	79·1	77·4	81·5	27·5	15 0	89·6	6 0	77·0	29
86·8	85·1	83·6	82·4	82·0	81·7	81·1	80·5	79·8	81·2	27·3	13 38	88·7	4 0	75·5	30
87·7	85·7	83·7	82·5	82·1	81·6	80·9	79·5	78·3	81·4	27·4	14 0	90·5	6 0	75·7	31
86·5	85·4	83·4	82·3	82·1	81·7	81·3	80·7	80·1	82·1	27·8					Mean.
+4·4	+3·3	+1·3	+0·2	0·0	—0·4	—0·8	—1·4	—2·0							Variation.
30·3	29·7	28·6	27·9	27·8	27·6	27·4	27·1	26·7							Mean in °C.
+2·5	+1·9	+0·8	+0·1	0·0	—0·2	—0·4	—0·7	—1·1							Variation in °C.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Date.	Hours. (B. M. T.)														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	78·7	78·5	77·7	77·2	76·7	76·3	75·8	77·4	80·0	81·8	83·9	86·4	88·6	87·7	86·7
2	77·2	77·1	76·6	76·0	75·2	74·6	74·4	75·6	77·7	79·3	81·4	84·4	86·9	86·3	86·4
3	75·4	76·5	76·7	76·0	74·6	74·3	74·7	76·8	78·2	79·5	81·2	82·6	84·7	85·1	85·5
4	77·0	76·6	76·4	76·0	75·1	74·3	74·0	76·8	77·7	79·6	81·4	83·2	85·9	85·7	85.6
5	76·2	76·2	76·5	76·0	75·4	74·7	74·5	75·6	77·8	80·2	82·8	85·2	87·5	87·6	86·8
6	77·9	77·0	76·6	75·7	75·5	76·2	76·6	78·3	80·2	81·7	83·6	86·2	88·7	89·9	88·4
7	76·1	76·6	76·3	75·4	74 7	75·2	76·2	77·6	79·4	80·7	82·6	85·1	88·2	89·5	87·2
8	76·9	76·4	75·6	75·5	74·7	74·8	74·7	76·6	78·6	80·8	83·2	85·8	88·0	89·3	87·8
9	77·3	77·0	76·0	75·5	75·2	75·2	74·7	76·1	77·6	79·5	81·8	84·1	86·7	87·2	87·3
10	76·0	76·0	74·9	74·6	74·6	74·0	73·7	75·4	76·8	79·4	81·6	83·8	85·7	87·7	87·6
11	76·7	76·4	76·5	76·7	75·7	75·2	75·5	76·7	78·1	79·9	82·3	84·4	85·0	85·6	86·1
12	79·0	78·9	78·2	77·7	77·5	77·6	77·5	79·4	80·2	81·5	83·2	84·0	84·6	85·0	84·8
13	78·8	78·4	77·1	76·7	77·4	77·5	77·3	78·2	78·5	80·1	81·4	82·9	84·0	84·2	83·3
14	78·2	78·4	77·9	77·2	77·1	77·0	77·4	78·4	79·9	81·0	81·8	82·3	83·6	84·2	83·8
15	78·2	77·7	77·3	77·1	76·5	76·1	76·2	78·2	79·7	80·8	82·0	83·0	84·2	84·6	83·7
16	77·6	77·1	76·3	75·7	76·4	76·6	76·9	77·8	79·2	81·0	83·9	85·3	85·4	86·0	86·0
17	79·3	79·9	79·7	79·3	78·8	78·2	78·2	79·1	79·4	80·9	83·3	84·9	86·4	88·1	88·4
18	76·7	76·0	75·4	74·0	73·3	75·0	75·2	75·5	76·9	78·9	81·0	83·9	86·6	86·3	85·5
19	81·2	80·5	79·6	78·9	78·5	78·5	78·6	79·3	80·3	81·2	83·4	84·7	84·5	84·2	82·9
20	78·7	78·5	78·6	78·6	78·5	78·4	78·2	79·6	80·7	81·7	83·7	84·5	85·3	85·3	85·5
21	79·6	79.3	79·1	78·7	78·5	78·2	78·2	78·5	79·6	81·2	82·2	83·5	83·9	84·5	84·8
22	78·4	78·2	78·7	78·5	78·5	78·3	78·0	78·7	79·7	81·1	82·2	83·3	83·8	84·7	84·7
23	77·7	77·4	77·2	76·7	76·3	75·7	75·3	77·3	79·4	81·0	82·0	83·2	83·9	84·3	84·3
24	78·3	77·7	78·3	77·7	77·7	77·7	77·6	78·4	79·9	81·3	82·9	84·8	86·4	86·5	86·6
25	79·9	79·3	78·7	78·0	76·6	76·7	77·4	79·2	80·7	81·6	83·4	85·0	85·6	85·8	86·1
26	78·6	78·0	77·6	77·5	78·5	79·0	78·5	79·0	80·3	82·3	83·6	84·6	84·7	84·8	84·0
27	80·4	80·1	80·2	80·2	79·5	78·4	78·9	79·9	81·2	82·1	84·0	86·4	87·3	87·6	87·5
28	79·6	80·0	79·8	79·6	79·7	79·3	78·8	79·7	81·0	82·3	85·0	86·5	87·7	89·3	90·7
29	76·7	76·4	76·4	76·8	76·3	75·9	75·7	77·7	79·2	81·0	82·7	84·4	86·5	86·5	86·4
30	77·8	77·2	76·6	76·2	75·0	74·5	74·1	75·2	77·0	78·5	80·7	83·1	85·4	87·4	87·9
Mean .	78·0	77·8	77·4	77·0	76·6	76·4	76·4	77·7	79·2	80·7	82·6	84·4	85·9	86·4	86·1
Variation .	—2·5	—2·7	—3·1	—3·5	—3·9	—4·1	—4·1	—2·8	—1·3	+0·2	+2·1	+3·9	+5·4	+5·9	+5·6
Mean in °C.	25·6	25·4	25·2	25·0	24·8	24·7	24·7	25·4	26·2	27·1	28·1	29·1	29·9	30·2	30·1
Variation in °C.	—1·3	—1·5	—1·7	—1·9	—2·1	—2·2	—2·2	—1·5	—0·7	+0·2	+1·2	+2·2	+3·0	+3·3	+3·2

DECEMBER.

1	71·1	76·3	75·3	75·0	74·8	73·7	73·6	74·5	76·0	77·9	80·1	81·4	83·8	84·9	84.7
2	76·5	76·2	75·0	74·2	74·0	73·8	73·0	73·8	75·3	77·1	79·5	81·4	84·0	84·7	84·9
3	74·0	73·4	74·5	73·8	72·5	71·3	72·4	72·7	73·7	75·4	78·0	80·0	82·0	83·5	84·1
4	76·0	75·4	74·8	74·5	73·7	73·2	72·7	73·1	74·0	75·7	78·6	80·4	82·2	83.4	83·5
5	73·0	72·2	72·0	73·1	72·9	72·9	72·8	73·7	74·9	76·4	78·6	81·8	83·2	84·0	84·2
6	74·5	74·5	73·6	73·0	72·5	72·9	72·7	73·5	74·9	77·1	79·6	82·0	83·9	83·7	84·1
7	75·5	75·4	74·3	74·3	73·6	73·2	73.0	74·0	75·7	77·3	80·2	82·1	84·3	85·3	86·4
8	73·9	74·5	73·6	72·9	73·3	73·2	73·3	74·2	76·0	77·5	80·0	82·0	83·3	84·7	85·4
9	74·6	74·6	74·4	74·4	74·0	73·2	72·8	73·0	74·2	75·7	77·7	79·9	82·6	84·8	85·0
10	72·7	72·8	72·5	72·9	72·0	72·5	72·2	73·4	75·4	77·0	79·3	80·5	81·7	82·5	83·0
11	75·2	74·9	74·1	73·8	73·5	73·0	72·5	72·9	73·8	75·4	77·7	79·1	81·2	81·3	81·5
12	74·2	74·0	73·6	73·4	73·2	72·8	72·5	73·7	74·9	76·5	78·9	80·7	81.8	82·0	81·7
13	73.5	72·7	71.8	71·4	71·6	72·3	72·4	73·4	75·1	77·3	79·9	82·2	84·2	85·7	86·8
14	74·0	74·1	74·1	73.6	73·4	73·2	73·1	73·8	75·3	77·0	79·5	81·6	83·8	84·9	85·8
15	74·5	74·1	73·3	72·8	72·5	72·4	72·1	73·9	75·1	76·5	78·8	80·7	82·8	84·1	84·4
16	71·5	70·6	71·3	71·1	71·0	70·6	70·3	70·9	72·8	73·9	76.8	79·2	81·3	82·3	82·6
17	73·0	72·4	73·9	73·9	73·4	73·1	73·0	73·8	75·7	77·8	80·0	82·7	84·5	83·9	83·2
18	77·0	77·1	77·1	77·2	77·2	77·1	77·0	77·1	78·9	81·0	83·0	84·5	86·0	86·2	85·9
19	75·1	75·4	75·4	75·1	74·7	74·8	75·0	75.2	75·7	76·0	76·5	76·6	77.0	77·6	78·3
20	76·4	76·5	76·6	76·4	75·5	75·3	75·6	75.8	76·7	76·9	77·1	78·0	79·2	79·5	80·0
21	74·5	73 7	73·2	73·1	72·7	72·5	72·4	73·1	75·1	76·4	78·1	79·4	80·0	80·2	80·8
22	73·5	73·0	72·5	72·3	72·3	73·0	72·2	72·8	75·0	76·6	78·7	80·7	82·4	82·5	81·9
23	73·7	73·4	73·1	73·1	73·0	72·1	71·7	72·1	74·0	76·0	77·7	79·0	79·8	79·9	80·1
24	70·9	69·8	69·3	69·1	69·1	68·8	69·0	69·7	71·9	73·3	74·7	76·7	78·1	78.8	79·0
25	71·4	70·7	69·9	68·7	69.8	69·9	69·7	70·8	72·2	73·1	75·3	77·5	79·4	80·3	81·1
26	71·8	71·0	70·2	70·1	70·3	70·5	70·5	71·9	73·2	74·7	77·0	79·6	81·0	81·1	81·2
27	72·1	71·3	71·2	72·0	71·6	71·3	70·8	71·8	73·0	74·7	77·1	78·9	81·0	81·9	82·3
28	71·4	61·2	71·0	71·0	70·6	69·7	69·8	70·3	72·4	73·5	75.6	77·0	78·8	80·6	80·6
29	71·5	70·7	70·2	70·0	69·6	69·1	68·9	70·6	72·6	74·8	77·2	78·0	79·0	79·3	79·4
30	71·2	70·8	70·4	70·0	69·1	68·5	67·7	68·2	71·1	73·5	76·1	77·3	79·1	79·0	79·3
31	70·4	70·3	69·2	68·8	68·0	67·8	67·1	68·9	71·7	73·0	75·0	76·5	79·4	80·7	81·0
Mean .	73·7	73·3	72·9	72·7	72·4	72·2	72.0	72·8	74·4	76·0	78·1	79·9	81·6	82·4	82·7
Variation .	—2·8	—3·2	—3·6	—3·8	—4·1	—4·3	—4·5	—3·7	—2·1	—0·5	+1·6	+3·4	+5·1	+5·9	+6·2
Mean in °C. .	23·2	22·9	22·7	22·6	22·4	22·3	22·2	22·7	23·6	24·4	25·6	26·6	27·6	28·0	28·2
Variation in .	—1·5	—1·8	—2·0	—2·1	—2·3	—2·4	—2·5	—2·0	—1·1	—0·3	+0·9	+1·9	+2·9	+3·3	+3·5

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Hours. (B. M. T.)									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
86.2	84·7	82·8	81·6	81·4	81·0	80·4	78·9	77·7	81·2	27.3	13 0	89·3	6 15	75·5	1
85·9	84·4	82·5	81·5	81·2	80·5	79·3	77·6	76·3	79·9	26·6	12 18	87·4	5 55	74·2	2
85·4	84·1	81·8	81·0	80·4	79·7	78·4	77·3	76·8	79.4	26·3	15 23	86·7	5 5	74·1	3
85·4	84·2	82·6	81·4	80·9	79·8	78·4	77·2	76·6	79·7	26·5	12 55	86·5	6 0	73·5	4
86·6	84·9	82·8	81·8	81·5	80·8	79·6	77·9	77·0	80·2	26·8	12 43	88·3	6 0	74·1	5
86·5	84·4	82·4	81·5	81·0	80·4	79·8	78·2	76·8	81·0	27·2	14 2	90·7	4 15	75·3	6
85·9	84·0	82·3	81·4	80·6	79·7	79·1	77·3	76·0	80·3	26·8	13 25	89·7	4 30	74·5	7
86·4	84·3	82·2	81·2	80·5	80·2	80·1	79·1	77·5	80·4	26·9	13 45	89·5	6 20	74·5	8
86·0	84·1	81·8	80·7	80·4	79·8	79·0	77·6	76·7	79·9	26·6	14 4	88·3	6 30	74·5	9
86·7	84·2	82·4	81·1	80·5	80·4	79·2	77·6	77·2	79·6	26·4	14 6	88·3	6 0	73·5	10
85·3	84·0	82·3	81·4	80·6	79·7	79·0	78.5	78·7	80·0	26·7	14 2	86·3	5 55	74·5	11
84·2	83·0	81·7	80·6	80·0	79·0	78·8	78·7	78·5	80·6	27·0	13 30	85·5	6 45	77·3	12
83·5	82·8	81·3	80·4	79·9	79·4	78·7	78·1	77·8	79·9	26·6	13 20	84·7	3 35	76·5	13
83·4	82·2	80·9	80·5	80·2	79·6	79·6	79·1	78·3	80.1	26·7	14 6	84·6	3 50	76·9	14
83·4	82·8	82·4	82·0	81·8	80·6	79·6	78·1	77·5	80·1	26·7	13 24	85·5	5 15	75·7	15
86·0	84·5	83·1	82·4	81·7	81·0	80·6	80·6	80·1	80·9	27·2	15 10	86·4	3 35	75·4	16
86·2	83·8	82·0	81·1	80·6	80·0	79·2	77·3	77·0	81·3	27·4	14 25	89·5	23 56	76·6	17
84·6	83·2	81·6	81·2	80·5	79·7	79·3	80·5	81·1	79·7	26·5	12 58	87·5	4 18	78·2	18
84·2	83·1	81·6	80·8	80·4	79·9	79·8	79·6	79·4	81·0	27·2	13 18	85·4	4 50	78·4	19
84·8	83·6	82·2	81·5	80·8	80·4	80·2	79·9	79·8	81·2	27·3	12 20	85·6	6 0	78·0	20
84·6	83·4	82·0	81·2	80·7	80·3	79·5	78·7	78·5	80·8	27·1	14 30	85·4	6 15	77·9	21
84·3	82·8	81·3	80·5	80·2	79·8	79·4	79·3	78·6	80·5	26·9	15 8	85·0	6 40	77·7	22
83·7	82·7	81·6	81·3	80·9	80·8	80·6	80·1	79·3	80·1	26·7	14 31	84·5	6 15	75·1	23
86·3	85·0	83·4	82·3	81·7	81·3	81·3	80·6	79·6	81·4	27·4	13 57	86.9	6 25	77·4	24
85·4	83·6	82·4	81·7	81·3	80·7	80·5	80·3	79·6	81·2	27·3	14 12	86·5	5 10	76·3	25
84·1	83·6	82·6	82·3	82·1	81·3	80·7	80·7	80·4	81·2	27·3	13 36	85·3	3 35	77·4	26
86·6	85·0	83·6	82·7	82·6	82·4	81·5	80·2	79·6	82·4	28·0	13 33	87·9	6 0	78·0	27
89·5	85·3	83·7	82·7	82·1	81·1	80·3	78·8	77·4	82·5	28·1	15 25	91·2	23 57	77·0	28
85·3	83·6	82·1	81·4	81·3	80·4	79·2	77·9	77·6	80·3	26·8	12 23	87·1	6 13	75·2	29
85·3	83·2	81·5	80·5	80·5	79·3	77·4	77·8	77·6	79·6	26·4	14 25	89·0	6 28	74·0	30
85·4	83·8	82·2	81·4	80·9	80·3	79·6	78·8	78·1	80·5	26·9					Mean.
+4·9	+3·3	+1·7	+0·9	+0·4	—0·2	—0·9	—1·7	—2·4							Variation.
29·7	28·8	27·9	27·4	27·2	26·8	26·4	26·0	25·6							Mean in °C.
+2·8	+1·9	+1·0	+0·5	+0·3	—0·1	—0·5	—0·9	—1·3							Variation in °C.

DECEMBER.

84·4	82·5	80·9	80·1	79·8	78·0	76·8	75·9	75·9	78·5	25·8	13 28	85·1	5 40	73·5	1
84·4	82·7	80·9	79·8	79·2	78·4	76·8	75·0	75·1	78·2	25·7	14 38	85·0	6 35	72·6	2
84·0	82·7	80·7	79·2	77·8	76·8	76·5	76·0	76·3	77·1	25·1	15 5	84·5	5 50	71·2	3
83·2	82·1	80·4	79·2	78·9	78·4	77·1	75·3	74·3	77·5	25·3	13 40	83·7	6 35	72·5	4
84·0	82·8	80·7	79·5	78·7	77·6	76·4	75·3	75·9	77·4	25·2	14 40	84·5	2 20	72·0	5
83·5	82·2	80·7	79·7	79·4	78·0	76·8	75·4	75·0	77·6	25·3	12 25	84·5	4 25	72·2	6
85·6	83·7	81·6	80·2	79·3	78·0	76·3	74·7	73·9	78·2	25·7	14 55	86·8	6 40	72·6	7
84·8	82·8	80·6	79·4	78·8	78·4	77·3	75·3	74·6	77·9	25·5	14 2	85·6	3 30	72·5	8
84·1	82·2	80·2	79·0	77·9	77·1	76·1	74·9	73·7	77·3	25·2	14 12	85·6	6 52	72·5	9
83·0	81·5	79·9	78·5	78·0	76·8	75·9	75·8	75·7	76·9	24·9	14 40	83·6	4 22	71·4	10
81·2	79·9	78·7	77·7	77·1	76·8	76·1	74·9	74·1	76·5	24·7	12 53	81·9	6 30	72·3	11
81·4	80·3	79·1	78·4	77·9	77·0	76·0	74·9	74·0	76·8	24·9	13 27	82·5	6 30	72·4	12
85·8	82·6	80·7	79·1	78·4	77·8	77·0	75·3	74·0	77·5	25·3	15 18	87·1	4 18	71·0	13
85·4	82·5	79·9	78·7	78·3	77·2	76·1	74·6	73·9	77·7	25·4	14 44	86·5	7 0	73·0	14
83·7	81·6	79·1	77·8	77·0	76·6	75·9	74·5	72·7	77·0	25·0	14 28	84·6	6 10	71·5	15
81·2	79·6	78·4	77·5	77·0	76·3	75·9	75·0	73·9	75·5	24·2	14 15	83·1	6 2	70·0	16
82·9	81·0	79·2	78·4	78·5	78·0	77·3	77·0	76·2	77·6	25·3	12 35	84·9	1 34	72·2	17
84·5	83·2	82·4	81·2	80·4	80·0	80·0	79·3	76·5	80·4	26·9	12 25	86·5	23 58	75·5	18
78·4	78·3	78·0	77·6	77·5	77·5	77·4	77·6	77·3	76·6	24·8	14 50	78·6	4 18	74·5	19
80·2	79·1	77·9	76·9	76·5	76·0	75·7	75·4	74·9	77·0	25·0	15 10	80·9	23 58	74·7	20
80·6	79·1	77·9	77·0	76·6	76·2	75·8	75·0	74·4	76·2	24·6	14 26	81·0	6 35	72·2	21
81·2	79·9	78 3	77·1	76·9	76·5	76·2	75·1	74·4	76·5	24·7	12 20	83·0	6 55	72·0	22
80·0	78·5	77·2	76·2	76·0	75·4	74·0	72·7	72·0	75·4	24·1	14 20	80·5	6 45	71·3	23
78·8	77·7	76·3	75·4	75·1	74·5	73·4	72·7	71·8	73.5	23·1	14 20	79·2	3 18	67·6	24
81·0	79·8	78·0	77·0	76·7	76·0	74·8	73·3	72·5	74·5	23·6	14 40	81·5	3 30	68·4	25
80·9	80·0	78·7	77·6	77·1	76·0	74·7	73·1	72·6	75·2	24·0	14 43	81·5	3 15	69·9	26
82·0	80·2	78·6	77·3	76·8	76·0	74·8	73·5	72·5	75·5	24·2	14 23	82·7	6 55	70·2	27
80·8	79·8	78·0	76·8	76·2	75.5	74·7	73·1	72·2	74·6	23·7	14 58	81·1	5 8	69·3	28
78·8	77·3	75·9	74·9	74·6	74·3	74·0	72·7	71·8	74·0	23·3	14 30	80·0	6 30	68·6	29
78·9	77·6	75·9	74·8	74·6	74·4	73·9	72·8	71·2	73·6	23·1	14 55	79·6	6 50	67·5	30
80·7	80·0	78·0	76·3	74·9	73·8	73·5	72·5	72·9	73·8	23·2	14 8	81·4	6 12	66·8	31
82·2	80·7	79·1	78·0	77·5	76·8	75·9	74·8	74·1	76·5	24·7					Mean.
+5·7	+4·2	+2·6	+1·5	+1·0	+0·3	—0·6	—1·7	—2·4							Variation.
27·9	27·1	26·2	25·6	25·3	24·9	24·4	23·8	23·4							Mean in °C.
+3·2	+2·4	+1·5	+0·9	+0·6	+0·2	—0·3	—0·9	—1·3							Variation in °C.

(Averages for periods of sixty minutes from full hour to full hour of local mean time).

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours (B. M. T.)												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	79	78	78	79	78	78	80	78	75	76	73	66	70
2	84	84	88	88	85	85	87	88	82	75	67	69	62
3	74	73	69	73	69	74	69	72	74	70	66	63	62
4	76	68	73	74	68	66	64	65	61	58	54	56	57
5	70	69	71	73	75	74	75	74	72	66	63	57	44
6	67	75	77	74	72	75	81	81	74	71	62	61	57
7	81	82	78	82	79	78	74	77	75	71	60	49	43
8	83	81	80	79	77	76	76	74	73	68	61	63	52
9	79	81	78	73	75	78	78	78	75	70	61	55	45
10	78	77	80	81	74	78	73	78	79	73	64	61	57
11	68	70	74	74	74	71	73	78	75	72	65	53	43
12	69	70	76	72	69	71	75	76	69	68	62	50	43
13	72	75	73	74	74	72	73	74	69	68	64	66	56
14	80	80	75	75	78	75	74	76	76	73	69	67	59
15	79	78	79	78	78	76	71	74	72	68	66	57	54
16	81	81	81	82	81	84	79	79	76	77	69	59	62
17	81	81	79	81	78	77	76	76	75	72	67	62	46
18	84	81	83	86	83	83	83	82	77	75	72	65	59
19	84	84	85	86	88	88	87	83	79	77	69	60	56
20	84	84	82	83	83	82	84	83	79	74	66	55	46
21	71	78	79	72	73	69	74	69	70	68	61	51	50
22	66	67	69	71	61	65	76	75	57	47	45	63	56
23	59	60	62	61	61	65	66	52	41	37	34	35	34
24	46	47	49	45	46	56	56	58	53	49	44	31	26
25	48	52	52	52	51	51	53	51	38	36	36	35	36
26	57	61	65	63	64	66	61	58	52	48	39	39	35
27	80	82	82	78	81	82	78	75	72	69	62	59	56
28	81	83	85	85	85	84	81	80	78	72	66	57	59
29	81	84	85	86	85	82	80	80	76	61	64	61	59
30	81	79	81	79	77	76	78	76	70	72	65	63	65
31	80	79	73	72	67	65	63	65	54	54	55	53	54
Mean .	74·3	75 0	75.5	75·2	73.8	74·3	74·1	73·7	69·3	65·6	60·4	55·6	51·7
Mean Vapour Pressure in inches.	·586	·584	·580	·571	·553	·549	·542	·551	·554	·557	.556	·550	·542

FEBRUARY.

1	64	61	54	56	64	65	62	57	56	58	51	50	55
2	79	80	82	83	80	74	65	65	59	61	54	53	52
3	59	60	60	63	64	66	57	51	58	53	48	44	43
4	47	45	53	54	46	46	57	60	59	59	48	45	45
5	60	65	70	69	57	51	51	50	52	47	46	41	47
6	62	59	71	73	74	77	80	79	74	71	67	67	65
7	73	73	74	79	81	81	82	82	74	73	70	70	66
8	85	86	86	88	86	84	83	82	76	70	64	61	53
9	67	77	81	81	79	77	77	76	72	68	61	54	51
10	78	81	84	85	84	85	89	87	81	78	75	69	65
11	87	86	89	89	89	88	87	84	81	74	72	72	69
12	86	87	84	83	86	87	85	85	80	76	70	69	67
13	84	85	86	87	87	86	84	79	78	71	67	69	69
14	85	88	87	87	86	87	87	85	75	68	67	60	50
15	82	83	85	86	86	86	86	84	81	77	73	72	68
16	82	84	83	84	86	86	85	85	81	79	76	74	72
17	78	77	74	79	83	83	78	80	78	68	62	56	59
18	65	65	65	69	72	73	74	71	63	63	58	59	60
19	80	81	80	80	79	81	84	84	79	73	68	67	65
20	74	76	79	83	83	83	85	82	77	72	67	64	59
21	66	67	73	77	78	76	80	79	74	70	62	55	55
22	69	76	78	81	83	83	80	78	74	69	64	56	57
23	80	84	84	81	83	85	86	84	80	76	67	65	64
24	74	76	79	79	81	80	80	74	70	68	62	56	48
25	76	77	79	79	80	81	79	76	75	72	69	70	67
26	77	77	79	81	78	78	79	76	76	68	63	59	58
27	76	78	80	81	82	84	84	84	77	69	64	63	63
28	70	75	78	71	70	68	70	68	63	58	56	49	45
Mean .	73·7	75·3	77·0	78·1	78·1	77·9	77·7	76·0	72·3	68·2	63·3	60·3	58·5
Mean Vapour Pressure in inches.	·595	·602	·609	·610	·602	·596	·588	591	·606	·607	·602	·600	·600

RELATIVE HUMIDITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (THE FIGURES REPRESENT PERCENTAGES).

Hours (B.M.T.).											Mean.	Mean Vapour Pressure in inches of mercury. *	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
70	64	66	76	82	82	85	86	84	83	84	**77·1**	·679	1
63	61	62	65	72	75	78	75	72	72	72	75·5	·659	2
63	66	67	68	71	67	71	67	66	67	69	68·7	·597	3
59	62	66	68	68	70	75	70	69	68	69	66·0	·578	4
49	59	67	72	75	69	68	66	67	69	71	67·3	·605	5
56	53	63	65	67	70	71	73	70	74	76	69·4	·632	6
46	52	61	69	75	78	75	73	71	70	78	69·9	·645	7
48	48	53	60	67	74	76	74	75	70	74	69·3	·625	8
55	56	62	66	74	76	78	79	81	81	81	71·5	·640	9
53	57	59	65	73	73	76	76	71	62	67	70·2	·623	10
45	53	54	62	63	67	69	69	72	66	65	65·6	·593	11
50	52	54	59	67	69	69	71	71	68	72	65.5	·591	12
57	62	66	68	74	80	77	71	63	63	72	69·0	·622	13
56	53	64	69	68	74	78	79	79	78	77	72·2	·653	14
58	62	62	65	68	78	83	85	86	85	84	72·7	·664	15
59	62	62	67	72	76	77	80	83	81	81	74.6	·673	16
44	48	64	69	74	76	77	77	79	80	81	71.7	·657	17
63	60	62	66	74	79	82	83	85	87	87	76·7	**·710**	18
55	56	59	62	67	73	75	74	73	79	81	74·2	·671	19
46	48	51	55	59	62	65	68	70	73	69	68·8	**·594**	20
53	56	59	60	62	63	63	63	60	59	60	64·3	·552	21
56	53	50	54	61	61	61	58	52	53	55	59·3	·507	22
36	38	39	41	46	45	45	42	41	47	46	47.2	·364	23
26	27	31	36	41	43	42	46	46	42	43	**42·9**	**·298**	24
37	39	43	51	56	57	58	58	57	57	57	48·4	·329	25
43	46	51	57	67	74	72	70	69	73	79	58·7	·458	26
57	56	58	62	69	72	74	75	73	78	75	71·0	·560	27
64	66	68	69	73	77	77	72	72	72	77	74·3	·618	28
62	65	67	71	75	80	80	77	77	77	80	74·8	·668	29
68	69	70	70	79	79	80	78	79	81	77	74·7	·689	30
59	58	60	61	62	67	69	71	68	63	65	64.0	·602	31
53·4	55·1	58·7	62·8	67·8	70·5	71·8	71·2	70·4	70·3	71·7	67·6	·592	Mean.
·573	·591	·620	·633	**·645**	·640	·639	·623	·598	·575	·575	·583		Mean Vapour Pressure in inches.

FEBRUARY.

57	60	61	64	70	73	74	73	73	74	76	62·8	·566	1
55	58	57	60	63	64	66	67	68	60	54	65·0	·578	2
48	54	54	50	52	52	49	54	56	47	48	**53.7**	**·491**	3
51	60	64	66	68	69	64	65	62	54	51	55·7	·504	4
46	44	43	45	51	56	60	63	63	59	60	54·0	·498	5
63	63	65	68	68	74	74	71	64	68	71	69·5	·590	6
63	62	57	62	73	80	81	83	83	84	85	74·6	·617	7
53	55	56	56	63	66	69	70	72	72	73	71·2	·595	8
61	60	60	62	66	68	71	75	77	74	75	69·6	·595	9
64	63	60	68	62	68	71	77	80	83	84	75·9	·662	10
63	61	61	66	67	70	74	76	78	81	83	77·0	·669	11
67	66	63	67	69	75	77	79	81	84	84	77·4	·673	12
70	71	72	73	77	79	79	78	78	80	84	**78·0**	·667	13
52	56	62	64	68	72	72	74	76	79	80	73·6	·644	14
62	59	61	66	70	69	68	70	74	76	76	75·0	·661	15
67	66	70	72	71	70	71	74	76	75	76	76·9	**·687**	16
60	57	58	59	59	63	61	57	59	67	68	67·6	·600	17
58	57	55	59	60	59	63	67	70	74	77	64·8	·552	18
66	63	61	61	67	66	66	64	62	66	67	71·3	·605	19
55	54	54	55	56	59	61	60	64	65	66	68·0	·560	20
57	57	55	55	59	63	67	70	73	73	69	67·1	·557	21
57	57	57	60	65	71	73	74	75	77	79	70·5	·629	22
65	62	61	62	63	68	69	68	68	68	71	72.7	·658	23
48	52	53	58	61	66	68	72	74	74	75	67·8	·605	24
67	64	61	63	66	69	70	70	70	72	75	72·0	·660	25
58	58	58	57	62	67	70	70	73	74	75	69·6	·619	26
62	62	65	67	68	67	69	70	67	64	68	71·4	·655	27
48	56	59	62	68	73	74	75	71	68	67	65·1	·629	28
58·7	59·2	59·4	61·7	64·7	67·7	69·0	70·2	71·0	71·1	72·0	69·2	·609	Mean.
·612	619	·615	**·622**	·617	·617	·616	·618	·613	·598	·595	.606		Mean Vapour Pressure in inches.

*Computed from mean temperatures mean relative humidities.

RELATIVE HUMIDITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. (B. M. T.)												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	72	80	81	80	79	81	79	72	71	66	54	46	55
2	80	79	82	81	85	84	80	74	63	61	52	56	61
3	87	87	85	85	82	84	85	85	80	76	68	58	55
4	76	75	79	78	77	76	76	73	58	48	57	63	64
5	71	72	79	83	85	85	74	72	68	62	55	49	53
6	72	75	73	79	80	77	73	68	71	63	54	49	47
7	83	88	90	87	87	86	88	87	83	80	76	72	68
8	82	83	85	86	86	87	85	83	80	77	76	74	70
9	79	80	82	84	80	77	71	73	70	63	60	64	60
10	75	77	73	73	68	65	62	58	60	53	47	45	53
11	49	47	49	47	50	56	56	55	56	56	55	58	62
12	71	71	74	77	77	73	74	76	69	56	50	55	64
13	85	86	86	86	88	85	81	75	73	67	69	67	63
14	82	87	86	86	86	86	84	78	73	69	61	58	61
15	82	80	80	78	76	76	75	67	55	60	42	28	37
16	71	65	67	71	71	74	75	70	67	63	60	67	65
17	80	82	81	83	85	84	82	78	74	75	75	74	70
18	80	79	81	84	87	86	85	82	76	73	62	61	62
19	69	73	76	73	68	67	71	66	60	56	56	58	51
20	80	81	81	78	69	67	66	63	52	52	55	58	59
21	72	74	75	77	80	80	80	77	71	68	67	65	60
22	77	73	75	78	78	77	75	70	59	56	57	61	60
23	72	74	75	75	79	80	79	76	71	64	62	62	58
24	78	80	83	82	78	76	73	70	67	65	62	62	63
25	80	80	79	80	81	82	83	81	78	73	68	66	64
26	63	65	68	69	70	72	73	68	68	66	63	62	59
27	74	75	74	74	76	77	78	78	73	69	62	58	57
28	71	72	71	72	75	78	78	75	72	66	58	54	51
29	67	67	68	73	77	77	78	77	70	55	49	52	54
30	73	73	72	71	67	72	70	59	42	36	34	42	43
31	72	72	74	78	79	78	66	69	71	60	50	47	57
Mean .	75·0	75·9	76·9	77·7	77·6	77·6	76·0	72·7	67·8	63·0	58·6	57·8	58·3
Mean Vapour Pressure in inches.	·704	·705	·710	·710	·697	·686	·669	·671	·675	·665	·660	·677	.696

APRIL.

1	80	80	78	80	83	85	82	80	80	77	73	68	67
2	86	86	86	86	86	80	81	76	69	62	59	57	62
3	78	82	78	77	76	68	63	66	71	65	60	61	60
4	75	80	76	72	68	63	64	53	45	45	40	42	49
5	70	70	70	72	74	71	65	59	54	55	55	53	54
6	84	82	82	82	84	86	85	83	78	75	74	73	72
7	65	71	77	80	82	83	83	79	71	71	64	61	56
8	72	74	79	82	82	77	77	67	58	51	48	51	55
9	71	71	75	77	76	73	69	60	36	35	47	50	56
10	79	74	71	77	84	84	82	81	78	74	71	71	70
11	86	87	85	85	86	85	85	83	79	77	76	73	70
12	85	85	84	83	85	86	85	81	77	76	72	71	68
13	80	81	81	81	81	81	82	78	75	73	71	71	69
14	81	81	81	81	81	82	82	80	75	74	70	69	67
15	78	79	78	78	79	80	78	76	73	71	68	65	66
16	79	80	80	81	81	82	80	75	71	71	69	65	64
17	82	82	82	81	82	83	83	78	69	66	67	69	69
18	78	78	73	71	70	71	72	65	54	56	57	56	54
19	76	76	85	85	85	86	86	85	83	80	76	73	72
20	81	80	82	83	81	81	81	77	76	75	72	71	69
21	75	77	77	77	78	79	77	74	71	69	67	66	66
22	77	77	77	78	80	79	78	74	69	67	64	62	60
23	79	78	78	77	77	79	79	79	74	72	70	66	62
24	73	74	74	73	72	76	76	72	69	64	63	61	58
25	78	78	80	78	78	86	86	83	79	77	66	66	63
26	82	82	82	81	81	82	80	75	74	69	68	66	63
27	71	75	75	75	75	76	72	68	67	64	61	59	58
28	76	76	75	71	72	73	74	71	67	66	63	63	63
29	76	76	77	77	76	77	78	75	73	70	69	63	62
30	77	77	76	76	77	78	76	74	68	66	64	63	61
Mean .	77·7	78·3	78·5	78·6	79·1	79·1	78·0	74·2	69·4	67·1	64·8	63·5	62·8
Mean Vapour Pressure in inches of mercury.	·815	·819	·813	·808	·806	·800	·797	·794	·795	·806	·812	·813	·815

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Hours. (B. M. T.)											Mean.	Mean Vapour Pressure in inches. of mercury.*	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
59	60	59	60	63	65	66	67	72	76	78	68·4	·674	1
62	59	58	61	66	72	73	77	80	82	85	71·4	·674	2
54	57	57	59	64	66	70	68	70	73	76	72·1	·663	3
63	63	6	65	69	71	73	75	75	79	72	69·5	·637	4
56	60	62	62	63	67	68	69	72	67	67	67·5	·640	5
51	54	62	65	69	76	78	78	82	84	85	69·4	·677	6
65	62	61	63	65	68	72	75	77	78	80	76·7	·756	7
67	66	65	62	64	68	69	70	74	79	76	75·6	·736	8
61	62	62	62	65	67	66	68	71	73	74	69·7	·708	9
49	52	57	57	55	57	57	54	56	56	56	59·0	·608	10
61	59	62	62	63	65	63	67	70	73	73	58·9	·588	11
62	64	66	68	71	74	74	76	78	78	82	70·0	·697	12
65	64	62	64	68	74	77	78	77	80	83	75·1	·785	13
64	65	65	64	69	68	71	71	77	80	83	73·9	·803	14
30	43	48	50	54	63	62	69	70	72	74	61·3	·739	15
67	67	63	66	68	69	70	74	75	78	80	69·3	·768	16
71	70	70	66	65	68	71	74	76	78	80	75·5	·800	17
62	60	60	60	65	69	70	72	74	74	75	72·5	·768	18
50	51	52	53	58	63	66	70	72	75	76	63·7	·688	19
61	59	59	62	69	72	71	71	70	73	72	66·7	·704	20
53	51	51	48	48	54	57	62	66	71	76	66·0	·683	21
59	58	53	55	57	63	66	68	73	74	70	66·3	·707	22
56	54	54	55	61	70	74	76	77	79	80	69·3	·720	23
63	63	64	66	69	73	75	76	77	78	79	71·7	·733	24
60	56	55	52	52	56	58	57	57	61	62	67·5	·683	25
57	53	53	56	60	65	68	71	72	72	73	65·3	·646	26
58	57	57	58	60	62	64	65	66	66	68	66·9	·668	27
49	51	51	54	57	62	63	66	65	65	65	64·2	·633	28
51	48	50	52	51	47	49	60	68	69	71	61·7	·641	29
43	44	46	47	47	51	55	55	58	67	73	55·8	·637	30
60	57	60	61	60	63	67	71	76	77	78	66·8	·733	31
57·7	57·7	58·3	59·2	61·8	65·4	67·2	69·4	71·7	73·8	74·9	68·0	·697	Mean.
·696	·696	·694	·684	·683	·686	·691	·702	·711	·718	·719	·692		Mean Vapour Pressure in inches of mercury.

APRIL.

64	61	61	64	68	74	77	80	82	84	86	75·6	·806	1
62	63	64	66	68	73	75	78	80	82	79	73·6	·780	2
60	58	56	56	58	60	61	64	62	70	73	66·0	·734	3
52	53	55	57	58	59	58	61	66	70	75	59·8	·707	4
54	55	55	58	61	67	70	78	78	77	81	64·8	·742	5
66	61	60	62	67	72	73	73	75	71	70	74·6	·824	6
49	52	51	51	53	60	65	70	74	76	75	67·5	·743	7
53	51	52	52	52	53	55	59	62	71	70	62·6	·710	8
58	54	55	59	58	58	58	55	52	61	74	59·9	·706	9
69	69	71	73	79	83	83	84	84	85	85	77·5	·922	10
68	65	66	67	70	74	79	83	83	83	84	78·3	·885	11
67	67	69	70	73	76	79	79	79	79	80	77·3	·888	12
69	69	70	70	75	79	79	79	79	81	81	76·5	·887	13
67	68	67	68	71	74	75	77	77	77	78	75·1	·863	14
66	66	66	68	70	72	73	75	76	78	77	73·2	·838	15
61	64	67	68	71	75	79	80	79	80	81	74·3	·848	16
67	63	66	67	68	73	75	75	75	77	77	74·0	·864	17
54	57	58	56	54	55	57	67	71	76	77	64·0	·820	18
68	69	67	67	69	75	76	77	78	81	80	77·3	·944	19
69	66	71	72	74	75	75	72	66	73	75	74·9	·894	20
64	64	64	64	66	66	68	71	73	74	74	70·9	·825	21
59	61	62	65	66	70	72	74	77	78	82	71·2	·802	22
59	56	58	60	62	65	69	70	70	72	73	70·2	·776	23
60	58	58	61	73	71	73	74	76	78	79	69·4	·755	24
62	64	61	63	68	71	75	77	77	79	81	74·0	·812	25
62	61	60	61	65	69	70	72	73	72	71	71·7	·795	26
58	57	58	59	61	66	69	70	70	72	74	67·1	·746	27
62	62	63	65	67	70	73	74	74	76	76	69·7	·783	28
61	61	62	64	68	73	75	77	78	77	77	71·7	·803	29
62	62	64	65	69	72	74	75	75	75	75	70·9	·817	30
61·7	61·2	61·9	63·3	66·1	69·3	71·3	73·3	74·0	76·2	77·3	71·1	·811	Mean.
·808	·799	·800	·798	·797	·796	·803	·810	·810	·820	·821	·806		Mean Vapour Pressure in inches. of mercury.

*Computed from mean temperatures and mean relative humidities.

RELATIVE HUMIDITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. (B.M.T.)												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	77	75	76	77	77	78	77	72	69	67	66	65	63
2	75	77	77	77	77	78	78	75	72	68	67	66	65
3	80	80	80	80	81	81	81	79	74	71	69	70	69
4	81	80	80	81	80	82	81	76	73	69	66	66	65
5	77	77	77	78	78	80	78	74	70	66	64	62	61
6	77	77	76	76	76	76	74	72	70	68	66	64	62
7	75	76	75	76	76	77	77	74	71	68	65	62	59
8	74	74	75	77	74	74	72	69	65	63	61	59	57
9	77	77	77	77	77	75	75	72	72	69	66	63	63
10	83	83	83	81	80	78	77	74	71	68	67	67	68
11	81	82	83	84	82	81	79	75	73	70	69	67	64
12	81	81	81	80	81	81	80	78	76	73	69	67	66
13	77	78	79	81	81	79	78	75	74	70	68	66	62
14	73	77	78	78	77	77	75	74	68	62	64	64	65
15	83	86	90	88	87	87	87	80	73	66	64	60	60
16	79	79	82	83	84	84	82	81	79	76	67	61	63
17	85	83	87	84	84	80	79	79	75	70	79	79	78
18	90	89	90	92	92	91	91	91	87	81	77	75	74
19	73	74	74	76	76	76	76	73	72	71	69	68	68
20	82	83	85	82	82	83	84	82	80	79	77	76	74
21	78	78	79	80	80	80	81	80	77	75	72	70	69
22	80	80	80	80	80	81	81	77	75	71	71	69	67
23	80	79	78	79	79	79	79	77	74	70	69	68	68
24	77	77	78	78	77	78	78	75	73	71	70	70	67
25	78	77	77	78	78	79	77	74	71	68	67	66	66
26	78	79	78	78	79	81	78	74	72	70	70	69	68
27	77	77	78	77	78	79	78	76	73	71	69	68	67
28	77	77	77	78	79	80	80	77	73	69	67	66	65
29	80	80	83	84	85	83	82	81	75	71	72	72	69
30	77	77	78	79	81	82	81	78	78	75	73	71	69
31	84	84	83	84	84	83	85	80	79	75	71	68	67
Mean .	78·9	79·1	79·8	80·1	80·1	80·1	79·4	76·6	73·7	70·4	68·7	67·2	66·1
Mean Vapour Pressure in inches.	·872	·869	·871	·868	·865	·865	·872	·874	·877	·874	·880	·880	·882

JUNE.

1	89	88	88	88	88	88	91	91	90	91	91	89	89
2	85	86	88	89	85	85	87	86	83	80	81	82	80
3	81	84	87	87	87	86	85	84	83	81	80	78	76
4	89	89	89	89	89	89	88	87	85	85	83	81	79
5	83	82	83	78	77	78	78	77	74	72	71	69	67
6	84	85	82	81	81	82	81	80	77	77	74	71	71
7	79	79	79	80	81	81	80	81	78	76	71	73	74
8	82	83	83	86	89	86	88	87	87	83	79	78	76
9	77	77	78	79	84	85	85	83	78	75	74	70	67
10	75	85	83	82	81	80	80	78	77	74	73	72	70
11	75	75	75	74	76	75	75	75	74	72	70	67	67
12	73	73	73	72	73	71	72	70	66	67	65	65	63
13	71	73	73	72	71	73	73	71	70	67	65	65	64
14	73	74	72	73	74	75	73	72	70	68	66	65	64
15	72	75	75	75	77	79	81	83	80	76	72	69	64
16	77	79	77	77	78	83	83	81	78	74	72	73	71
17	81	83	82	82	82	83	81	79	79	76	75	70	69
18	76	77	76	75	76	80	82	80	81	77	72	69	68
19	81	81	79	83	86	87	87	86	87	82	78	73	72
20	84	83	82	82	82	82	83	85	83	83	85	87	85
21	88	86	90	91	90	91	91	87	85	82	83	81	83
22	86	83	86	84	88	90	89	90	91	88	85	87	87
23	87	83	83	83	83	83	85	83	84	80	78	80	82
24	88	86	88	90	91	92	91	89	87	86	86	85	87
25	84	84	84	84	84	84	89	87	85	83	81	79	80
26	90	89	88	85	84	83	85	83	81	80	81	80	79
27	85	87	85	85	87	87	92	91	91	85	86	84	83
28	91	86	85	85	87	86	86	84	82	81	87	87	85
29	86	85	83	84	84	84	85	85	81	80	80	79	79
30	88	89	87	86	85	85	85	83	80	80	79	78	79
Mean .	82·0	82·3	82·1	82·0	82·7	83·1	83·7	82·6	80·9	78·7	77·4	76·2	75·3
Mean Vapour Pressure in inches.	·909	·906	·901	·894	·896	·901	·907	·913	·923	·928	·930	·936	·931

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours (B.M.T.)											Mean.	Mean Vapour Pressure in inches of mercury *	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
60	59	59	64	68	70	71	73	75	75	76	70·4	·824	1
64	66	66	69	73	77	77	79	79	82	82	73·6	·862	2
70	70	70	72	77	78	79	81	82	83	81	76·6	·900	3
66	66	66	68	70	74	75	76	76	76	77	73·7	·863	4
59	59	59	60	62	68	72	74	76	76	76	70·1	·813	5
61	60	61	63	68	71	73	73	74	73	73	70·2	·809	6
59	60	60	62	65	66	69	68	71	72	73	69·0	·805	7
56	59	62	65	69	73	75	77	77	76	77	69·2	·823	8
64	66	68	70	73	74	75	79	81	84	85	73·3	·869	9
66	67	69	71	75	77	77	78	79	79	80	74·9	·900	10
63	64	64	67	72	74	76	76	78	79	80	74·3	·896	11
64	64	64	66	70	73	74	75	76	76	76	73·8	·898	12
61	62	63	64	65	68	70	71	71	71	70	71·0	·864	13
66	66	65	66	67	70	74	77	78	83	84	72·0	·894	14
69	68	69	68	67	73	74	75	76	81	80	75.5	·870	15
66	71	72	76	86	89	88	88	89	90	88	79·3	·891	16
78	81	82	83	84	83	84	83	83	88	90	81.7	·912	17
71	71	69	75	73	75	76	77	76	77	74	86·6	·879	18
67	66	67	71	74	75	76	77	77	79	81	73·2	·833	19
70	70	70	70	72	74	75	75	75	77	79	77·3	·882	20
67	67	67	69	70	74	76	77	77	77	78	74·9	·885	21
67	67	64	66	69	73	76	78	77	78	77	74·3	·890	22
67	66	67	68	70	73	74	73	75	76	77	73·5	·889	23
67	67	64	67	71	72	74	76	77	77	77	73·3	·883	24
65	65	67	71	73	74	76	76	77	77	78	73·1	·887	25
67	66	64	65	68	71	73	74	76	76	76	72·9	·893	26
66	61	63	63	66	71	73	73	74	75	77	72·1	·9 6	27
65	66	66	70	72	75	76	76	78	78	79	73·6	·916	28
68	68	70	73	75	76	76	78	78	79	79	76·5	·949	29
67	66	68	69	71	73	74	74	81	81	84	75·3	·940	30
68	68	72	77	83	87	89	88	89	90	89	80.3	·947	31
65·6	65·9	66·4	68·6	71·5	74·2	75·7	76·6	77·7	78·7	79·1	74·2	·880	Mean.
·884	·885	·880	·879	·879	·875	·878	·880	·887	·889	·885	·877		Mean Vapour Pressure in inches.

JUNE.

91	89	87	85	85	86	86	87	87	86	85	88·1	·927	1
78	78	80	81	82	84	84	84	83	84	85	83·3	·897	2
76	74	76	79	81	83	81	85	85	85	89	82·2	·929	3
77	76	76	73	73	76	76	77	78	79	79	81·7	·929	4
67	67	69	70	72	74	76	75	77	79	80	74·8	·899	5
69	69	71	71	72	74	76	79	81	81	81	77·1	·920	6
71	71	72	71	70	75	76	77	79	79	81	76·4	·906	7
75	73	72	73	76	79	74	75	77	78	77	79·8	·902	8
67	67	66	67	70	71	74	74	75	76	75	74·7	·906	9
70	68	67	67	70	71	73	76	76	77	77	75·1	·917	10
65	64	66	66	67	70	73	72	71	71	71	71·1	·876	11
62	61	61	61	64	68	71	71	71	71	70	68.1	·837	12
64	64	64	64	66	70	71	71	72	74	74	69·3	·849	13
64	64	64	66	69	69	70	70	73	75	74	69.9	·856	14
62	63	64	66	67	70	70	71	74	75	74	72·3	·880	15
71	71	71	73	75	78	78	77	77	77	78	76·2	·930	16
73	69	69	72	76	76	76	76	79	78	80	76·9	·924	17
68	71	73	80	78	78	79	79	79	81	79	76·4	·924	18
73	72	74	75	76	78	79	79	79	82	83	79·7	·936	19
83	81	82	82	79	80	80	85	88	91	86	83·5	·944	20
84	91	92	91	91	91	90	86	88	89	87	87·8	·924	21
86	88	86	87	91	91	91	91	89	88	87	87·9	·919	22
84	82	82	88	81	85	89	88	89	91	90	84·3	·925	23
90	91	91	89	87	89	85	84	85	85	85	87·8	·915	24
85	85	83	82	81	86	88	88	88	89	88	84·6	·929	25
80	81	79	80	83	83	85	87	88	87	85	83·6	·948	26
87	84	82	83	81	83	85	90	90	89	92	86·4	·930	27
83	79	81	86	87	87	87	87	86	86	85	85·3	·936	28
80	79	79	79	79	83	85	86	83	83	84	82·3	·951	29
76	75	75	77	79	79	80	82	83	83	83	81·5	·957	30
75·4	74·9	75·1	76·1	76·9	78·9	79·6	80·3	81·0	81·6	81·5	79·6	·914	Mean.
·932	·926	·929	·926	·918	·915	·908	·908	·910	·910	·909	·915		Mean Vapour Pressure in inches.

*Computed from mean temperatures and mean relative humidities.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours (B.M.T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	83	84	84	84	83	85	85	83	82	80	79	77	76	76
2	84	81	83	83	83	83	82	79	79	76	75	73	73	73
3	79	80	81	79	80	80	80	78	77	75	73	72	73	71
4	81	84	83	81	81	81	79	78	76	75	74	72	70	69
5	79	79	78	78	78	77	78	77	76	74	72	74	73	72
6	79	79	80	80	80	81	80	77	76	76	78	73	74	74
7	80	80	79	80	80	80	81	80	76	75	72	73	73	70
8	77	78	78	79	79	79	78	75	76	75	73	73	72	72
9	79	80	80	79	79	79	79	78	78	76	76	74	72	73
10	79	79	80	80	80	80	80	80	79	77	75	76	79	80
11	81	83	82	82	82	81	82	80	77	75	74	72	70	69
12	77	78	77	78	82	81	83	85	81	79	79	77	72	71
13	81	79	79	81	80	80	79	77	79	87	87	87	82	81
14	92	93	92	91	91	92	91	92	93	91	92	88	84	83
15	85	87	84	82	83	84	82	83	82	79	81	80	82	77
16	82	83	85	91	91	91	88	91	89	88	91	91	89	91
17	90	91	92	93	90	87	85	84	83	81	79	79	79	79
18	85	85	85	85	83	85	83	83	81	79	79	79	79	80
19	83	83	84	85	85	86	87	85	83	82	84	80	79	78
20	86	87	85	87	87	86	87	84	83	83	82	80	79	79
21	82	83	83	84	83	84	84	82	80	79	77	76	75	74
22	83	83	83	85	86	85	85	83	80	77	76	75	74	72
23	82	81	81	82	83	83	82	79	77	75	74	74	73	76
24	79	81	81	82	82	82	82	81	83	80	79	77	76	74
25	80	81	81	79	86	84	79	79	79	84	88	86	85	75
26	84	86	82	81	84	83	83	80	81	80	80	77	77	79
27	85	87	84	86	85	85	88	88	92	91	90	88	87	82
28	85	87	90	89	90	90	88	87	87	86	85	83	87	85
29	85	88	88	89	90	89	88	88	86	85	88	87	85	85
30	85	86	86	88	90	88	90	92	93	93	94	93	93	93
31	94	93	93	95	94	93	93	93	93	94	94	95	94	93
Mean . .	82·8	83·5	83·5	83·8	84·2	84·0	83·6	82·6	81·8	80·9	80·6	79·4	78·6	77·6
Mean Vapour Pressure in inches.	·892	·893	·891	·888	·886	·887	·888	·892	·904	·914	·923	·930	·932	·923

AUGUST.

1	95	95	94	96	97	95	94	92	91	89	89	90	93	91
2	91	92	92	90	90	90	90	91	92	92	92	93	90	94
3	89	88	88	86	90	91	89	88	88	88	87	87	88	87
4	86	86	85	88	86	89	88	92	94	93	92	93	94	94
5	94	93	92	93	93	93	94	93	93	93	92	91	90	88
6	90	88	89	88	89	87	88	87	87	86	83	86	83	81
7	84	83	84	83	84	84	84	85	84	83	79	79	78	82
8	86	89	86	88	88	87	88	87	87	85	84	81	81	86
9	85	85	85	89	91	90	90	91	92	92	90	89	89	92
10	84	86	86	87	87	90	87	87	87	85	83	79	81	82
11	90	89	90	91	89	90	89	87	87	85	84	83	81	79
12	84	83	85	84	84	84	84	82	83	81	78	77	77	75
13	86	86	84	83	83	86	84	84	85	81	78	82	84	79
14	85	82	81	82	81	80	81	80	79	79	79	76	76	74
15	82	83	86	84	84	83	84	84	84	83	81	81	79	77
16	80	80	81	82	82	82	83	82	85	88	90	88	84	81
17	82	82	82	83	84	83	83	81	81	80	78	79	82	77
18	81	83	84	84	84	89	89	84	83	81	79	76	75	74
19	82	84	85	89	90	88	89	89	89	88	81	78	74	74
20	82	85	84	82	82	82	82	82	80	76	74	73	72	69
21	79	78	79	78	79	80	81	88	87	85	84	83	81	80
22	82	82	84	84	83	84	84	84	81	77	75	71	67	67
23	89	89	89	89	91	91	91	91	88	85	81	81	80	78
24	87	87	85	86	86	86	87	86	81	77	77	77	78	78
25	83	84	87	90	91	89	87	86	88	87	91	90	89	91
26	86	86	90	88	86	85	84	86	84	82	80	78	77	76
27	82	86	84	82	83	82	84	83	79	79	78	77	76	74
28	81	81	81	81	82	83	82	80	75	78	75	73	73	73
29	77	79	81	82	81	81	81	78	77	74	74	72	70	70
30	81	82	83	85	85	86	88	84	83	79	76	74	73	71
31	81	81	82	83	81	85	85	86	83	75	71	72	73	71
Mean . .	84·7	85·1	85·4	85·8	86·0	86·3	86·3	85·8	85·1	83·4	81·8	80·9	80·3	79·5
Mean Vapour Pressure in inches.	·852	·850	·850	·846	·850	·848	·856	·865	·878	·883	·886	·888	·887	·884

(Averages for periods of sixty minutes from full hour to full of local mean time.)

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours (B.M.T.)										Mean.	Mean Vapour Pressure in inches of mercury *	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
											"	
76	76	76	78	80	79	81	82	83	84	80·7	·963	1
72	71	74	73	77	77	77	79	79	80	77·7	·931	2
72	72	73	74	76	76	77	78	79	79	76·4	·912	3
70	72	74	74	75	77	77	77	79	80	76·6	·909	4
72	73	76	80	77	77	77	79	80	79	76·5	·907	5
73	72	71	73	75	75	76	76	78	79	76·5	·916	6
73	73	74	76	78	78	77	78	78	76	76·7	·919	7
75	83	79	79	79	77	77	79	79	79	77·1	·900	8
73	73	73	75	77	77	77	79	79	78	76·8	·911	9
78	76	77	78	78	79	85	81	80	81	79·0	·922	10
69	68	69	72	74	77	77	75	76	76	76·0	·907	11
71	72	76	77	75	78	78	73	74	76	77·1	·889	12
81	81	79	77	77	77	79	85	86	90	81·3	·878	13
80	85	84	83	82	83	84	85	88	86	87·7	·905	14
77	78	79	79	80	79	81	81	83	85	81·4	·902	15
87	87	89	86	85	83	83	83	85	86	87·3	·886	16
81	79	85	83	82	83	83	83	84	84	84·1	·908	17
79	80	79	80	81	85	82	82	87	83	82·0	·912	18
80	79	80	81	82	81	84	83	85	85	82·7	·914	19
78	78	79	81	81	81	91	81	83	83	82·5	·906	20
73	74	74	76	78	79	81	82	83	84	79·6	·909	21
72	72	73	74	76	77	78	77	79	80	78·5	·890	22
79	77	76	71	77	77	78	79	78	79	78·0	·879	23
74	77	81	77	77	83	83	81	81	83	79·8	·893	24
74	75	77	78	82	82	84	81	83	83	81·0	·872	25
80	79	78	79	81	81	81	81	84	85	81·1	·876	26
81	81	84	82	81	83	83	83	84	83	85·1	·887	27
88	84	83	83	83	83	83	83	83	84	85·7	·893	28
87	87	89	91	90	89	89	87	88	87	87·7	·902	29
91	91	91	91	92	91	93	91	93	93	90·9	·884	30
94	95	93	90	92	91	92	93	94	94	93·3	·861	31
77·7	78·1	78·9	79·1	80·0	80·5	81·2	81·2	82·4	82·7	81·2	·901	Mean.
·919	·918	·912	·903	·896	·890	·894	·891	·893	·893	·902		Mean Vapour Pressure in inches.

AUGUST.

91	91	93	91	89	91	90	91	91	88	92·0	·872	1
94	93	91	86	91	90	89	92	92	89	91·1	·852	2
90	89	93	93	92	91	86	86	86	87	88·6	·882	3
95	95	93	94	93	92	92	91	93	93	91·3	·871	4
91	91	89	88	88	91	92	90	91	89	91 3	·877	5
81	81	80	83	85	86	86	85	86	84	85·4	·867	6
78	80	81	83	84	85	84	85	88	88	83·0	·859	7
82	86	84	84	83	85	84	84	86	85	85·3	·874	8
86	83	83	85	84	84	84	84	84	83	87·1	·856	9
82	86	87	89	89	89	89	89	89	86	86·1	·877	10
79	78	77	78	80	81	82	82	85	84	84·2	·869	11
77	82	79	79	81	83	85	84	83	82	81·5	·863	12
80	78	80	81	81	80	79	80	82	84	82·1	·861	13
78	81	79	79	78	79	79	81	83	82	79·7	·836	14
77	78	77	81	74	78	80	80	80	80	80·8	·850	15
77	77	77	78	80	81	82	83	82	82	82·0	·841	16
75	77	76	76	80	81	83	81	82	84	80·5	·861	17
74	74	74	77	79	80	80	81	82	82	80·4	·857	18
74	73	75	77	78	78	79	80	81	83	81·6	·862	19
71	70	70	73	76	77	77	77	76	78	77·1	·841	20
77	76	73	75	76	77	77	78	80	82	79·7	·847	21
72	75	77	78	81	81	81	82	86	88	79·4	·866	22
76	76	77	79	81	82	84	84	85	87	84·3	·938	23
77	76	77	78	77	79	81	82	81	83	81·2	·909	24
93	93	92	92	92	92	93	91	91	88	89·6	·883	25
78	77	75	78	78	80	81	81	80	83	81·6	·870	26
74	74	81	80	81	81	79	80	82	81	80·1	·860	27
71	72	72	75	77	78	78	80	78	76	77·3	·840	28
71	70	74	76	79	75	79	78	79	80	76·6	·835	29
69	69	70	73	74	75	77	78	77	80	78·0	·848	30
71	70	71	76	76	73	76	77	76	77	77·2	·845	31
79·4	79·7	79·9	81·1	81·8	82·4	82·8	83·1	83·8	83·8	83·1	·864	Mean.
·886	·883	·871	·868	·853	·853	·852	·852	·856	·851	·865		Mean Vapour Pressure in inches.

*Computed from mean temperatures and mean relative humidities.

RELATIVE HUMIDITY, 1933.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. (B. M. T.)													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	78	78	77	80	81	83	83	80	77	73	71	70	68	70
2	78	78	78	78	80	78	78	76	75	72	70	70	70	67
3	79	81	80	79	80	86	88	87	83	79	75	72	69	68
4	83	82	84	86	85	83	84	85	81	75	75	73	72	70
5	83	84	84	85	86	84	87	87	86	86	83	83	78	77
6	91	91	89	91	90	91	92	92	89	84	81	83	82	80
7	93	93	94	94	93	93	94	93	91	87	87	85	82	80
8	92	91	92	93	92	92	93	91	89	86	85	84	83	80
9	93	94	93	94	93	92	92	92	92	91	87	87	86	89
10	94	93	93	93	93	92	93	93	91	89	88	89	87	88
11	90	91	89	89	90	91	91	91	92	92	91	92	89	90
12	92	92	94	93	93	93	92	93	95	94	93	91	87	87
13	93	92	93	91	90	91	92	93	89	89	87	87	86	85
14	90	91	91	90	89	89	87	89	88	87	87	88	89	86
15	92	92	93	92	93	91	91	91	92	92	92	91	91	90
16	92	91	90	89	89	90	89	89	88	87	88	87	87	86
17	89	87	87	86	88	92	93	89	91	91	90	90	91	89
18	93	91	90	91	89	88	89	89	90	88	85	85	83	84
19	83	83	83	83	84	85	84	82	81	78	77	78	78	77
20	84	84	83	84	84	84	86	83	83	79	75	74	73	72
21	82	84	83	83	84	84	82	82	80	77	75	73	73	77
22	79	82	82	82	85	84	87	85	79	78	75	74	71	70
23	80	80	80	81	81	81	80	79	77	75	71	71	71	70
24	81	81	82	81	81	81	81	80	79	77	75	75	74	71
25	83	82	83	82	80	84	82	82	78	77	73	73	71	71
26	83	84	84	85	86	88	89	87	85	80	75	71	69	70
27	82	83	84	83	84	84	86	82	80	77	72	67	65	59
28	82	80	80	80	81	82	82	80	76	74	73	72	74	74
29	86	87	85	86	86	86	87	82	75	75	73	70	71	75
30	80	82	86	86	86	88	87	84	83	85	80	78	74	69
Mean . .	86·0	86·1	86.2	86·3	86·5	87·0	87·4	86·3	84·5	82·5	80·3	79·4	78·1	77·4
Vapour Pressure in inches.	·851	·846	·839	·840	·842	·844	·850	·859	·872	·874	·882	·889	·891	·892

OCTOBER.

1	87	87	89	89	86	87	86	88	87	84	77	74	71	74
2	84	84	84	87	89	92	92	89	87	85	81	79	74	70
3	85	87	86	89	90	90	91	90	87	84	81	77	71	69
4	86	87	85	85	88	92	92	91	89	85	81	79	77	75
5	83	85	86	87	87	87	88	84	79	80	77	78	79	77
6	86	87	87	87	87	88	86	86	83	79	78	74	74	76
7	86	87	88	88	88	87	88	87	85	83	81	80	77	77
8	82	83	85	87	89	89	89	88	84	81	79	78	78	78
9	80	81	83	80	80	82	84	84	82	81	72	60	70	73
10	86	86	87	89	89	89	89	88	86	83	74	68	67	69
11	82	84	85	85	87	80	76	73	70	68	67	62	55	55
12	85	83	85	84	83	83	83	81	73	71	69	63	58	56
13	83	83	85	81	82	79	78	78	78	75	68	65	60	57
14	75	83	83	83	83	84	85	83	79	77	76	75	74	72
15	82	83	82	82	81	78	78	81	85	80	75	71	64	69
16	84	83	84	84	83	85	85	83	81	80	78	77	79	76
17	76	78	81	81	84	85	87	85	81	77	71	62	56	55
18	54	62	67	64	65	77	74	73	68	65	60	56	64	61
19	69	71	72	71	69	73	81	77	73	69	70	70	66	64
20	82	81	81	79	79	79	78	84	86	88	87	84	78	75
21	78	78	78	78	78	82	82	82	81	77	76	78	78	78
22	82	82	81	80	82	82	82	79	80	77	76	73	70	71
23	80	79	79	80	81	82	84	82	76	73	71	67	66	64
24	78	76	79	80	78	79	79	81	76	73	70	68	66	66
25	78	79	80	82	84	85	85	85	80	70	61	49	52	51
26	77	72	73	74	74	78	83	79	76	72	62	55	46	39
27	81	81	86	84	83	77	77	70	68	55	51	47	45	45
28	80	82	82	80	78	77	74	67	64	59	51	45	49	49
29	69	69	72	73	69	66	57	53	47	52	51	52	42	35
30	70	69	71	72	71	68	67	60	56	57	55	47	39	38
31	68	65	69	73	71	70	70	66	63	59	51	44	39	37
Mean . .	79·3	79·9	81·1	81·2	81·2	81·7	81·6	79·9	77·1	74·2	70·2	66·4	64·0	62·9
Mean Vapour Pressure in inches.	·808	·803	·810	·803	·798	·792	·794	·809	·817	·820	·814	·800	·799	·806

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours (B. M. T.)										Mean.	Mean Vapour Pressure in inches of mercury *	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
71	71	71	73	73	75	75	75	76	78	75.3	·824	1
68	70	71	73	73	75	73	74	77	77	74·1	·816	2
68	66	68	69	75	74	74	77	78	79	76·4	·839	3
68	72	73	75	81	83	83	83	81	80	79·0	·859	4
82	87	91	90	89	92	92	93	93	92	86·4	·889	5
81	82	85	88	92	92	92	92	93	92	88·1	·886	6
83	88	91	92	92	90	91	91	91	93	90·0	·906	7
81	85	88	90	93	93	93	94	93	93	89·4	·896	8
91	91	92	92	93	92	91	93	93	94	91·5	·902	9
89	87	85	86	90	90	90	90	90	90	90·1	·903	10
91	91	93	92	93	91	91	91	91	91	91·0	·888	11
89	91	91	93	92	92	90	92	92	91	91·7	·892	12
87	86	85	86	91	90	90	89	89	91	89·3	·904	13
89	86	87	89	90	89	89	89	90	89	88·7	·898	14
87	87	87	89	91	90	92	91	90	90	90·7	·909	15
81	83	83	85	85	84	85	88	87	88	87·1	·896	16
91	93	93	91	90	89	89	90	90	91	90·0	·896	17
86	87	85	87	86	86	86	85	85	84	87·2	·880	18
74	76	76	79	82	83	81	82	83	83	80·6	·851	19
70	71	72	75	77	77	78	78	81	81	78·7	·839	20
77	75	76	77	78	79	78	80	79	79	79·0	·829	21
69	70	71	73	75	75	78	79	78	79	77·5	·813	22
71	71	71	75	77	78	79	80	80	81	76·7	·818	23
71	75	77	78	78	79	81	81	81	82	78·4	·836	24
70	69	71	77	78	78	78	81	84	85	78·0	·813	25
69	68	69	73	75	75	76	76	77	79	78·0	·800	26
60	61	63	67	70	72	74	75	77	80	74·5	·776	27
75	77	78	81	83	83	83	84	84	86	79·3	·840	28
75	76	78	82	84	83	80	79	81	81	80·1	·894	29
72	72	76	78	81	87	86	87	87	86	81·7	·871	30
77·9	78·8	79·9	81·8	83·6	83·9	83·9	84·6	85·0	85·5	·833	86·3	Mean.
·889	·882	·871	·864	·866	·863	·855	·856	·855	·851	·863		*Mean Vapour Pressure in inches

OCTOBER.

70	69	68	75	78	79	80	81	82	82	80·4	·860	1
71	76	77	73	77	79	82	82	83	84	81·7	·860	2
70	72	78	79	80	81	81	80	85	85	82·0	·880	3
76	75	75	77	79	79	82	84	84	81	82·7	·896	4
76	80	82	82	84	83	83	84	84	86	82·5	·894	5
78	77	76	82	86	88	89	86	84	85	82·9	·864	6
78	78	79	82	81	81	81	83	81	82	82·8	·915	7
80	80	82	86	88	85	85	87	85	83	83·8	·953	8
72	71	73	79	81	84	85	85	86	84	78·8	·896	9
67	67	70	73	82	84	84	83	84	84	80·3	·905	10
55	56	60	63	68	73	76	79	83	83	71·9	·842	11
62	63	65	70	72	75	76	75	74	77	73·6	·865	12
61	65	66	64	65	69	74	78	71	71	72 3	·860	13
72	73	74	78	79	79	81	84	80	83	79·0	·928	14
72	73	72	77	72	74	77	80	84	83	77·3	·849	15
72	70	70	73	71	66	66	65	67	72	76·4	·858	16
60	63	66	65	66	68	69	72	72	62	71·7	·785	17
60	61	62	64	65	63	64	62	64	65	64·2	·705	18
65	66	71	74	76	77	79	80	82	81	72·7	·824	19
75	73	73	79	78	73	77	81	81	80	79·6	·857	20
78	79	80	80	82	82	83	83	83	84	79·9	·788	21
68	70	72	74	75	77	78	71	74	77	76·4	·766	22
66	66	68	70	71	71	74	77	78	78	74·3	·769	23
66	67	71	76	78	78	78	79	80	79	75·0	·800	24
50	54	58	62	64	69	71	73	70	74	69·4	·759	25
51	52	58	60	63	65	71	74	78	80	67·2	·735	26
47	45	48	56	66	72	75	77	78	80	66·4	·727	27
50	49	51	55	58	64	67	72	74	69	64·4	·693	28
33	48	54	56	58	60	69	68	69	70	58·0	·622	29
48	50	47	51	58	63	67	71	70	70	59·8	·635	30
46	50	58	60	63	67	71	71	68	69	61·2	·655	31
64·4	65·7	67·9	70·8	73·0	74·5	76·6	77·6	78·0	78·2	74·5	·814	Mean.
·822	·828	·826	·808	·804	·815	·820	·827	·816	·802	·810		Mean Vapour Pressure in inches.

*Computed from mean temperatures and mean relative humidities.

(Averages of period of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	72	74	75	77	77	76	70	59	56	54	48	41	38	46
2	80	81	79	74	79	77	78	72	67	60	52	42	43	47
3	70	82	83	74	75	79	78	74	72	70	65	55	52	49
4	69	73	78	78	77	78	74	73	72	66	62	55	47	51
5	73	76	78	79	80	81	81	76	71	64	51	46	43	49
6	80	75	77	74	71	63	57	52	51	54	52	43	38	34
7	80	79	76	71	72	69	59	58	54	55	53	47	39	37
8	78	76	76	77	75	74	69	65	62	53	51	43	37	37
9	80	77	72	75	75	75	74	64	60	58	54	46	39	45
10	81	82	77	75	74	74	73	71	67	57	54	49	45	44
11	77	77	80	80	80	80	80	75	68	66	59	52	59	61
12	80	80	83	85	83	82	82	78	76	74	73	73	70	64
13	82	83	85	86	83	82	83	82	81	76	73	75	73	71
14	84	84	86	87	86	85	83	83	80	77	76	76	71	61
15	83	84	85	86	83	84	84	80	80	76	69	65	60	59
16	75	75	78	77	75	80	83	81	76	71	65	64	68	69
17	82	86	86	84	72	61	52	47	45	45	46	41	36	34
18	72	75	71	67	62	62	63	61	61	58	52	47	43	50
19	67	67	66	69	68	69	69	69	68	68	65	62	65	69
20	84	83	82	82	82	82	84	82	80	79	71	69	68	67
21	84	84	84	86	85	85	86	85	82	79	76	71	72	71
22	84	84	85	86	85	86	86	85	84	81	77	72	72	65
23	78	79	82	79	79	80	82	80	78	72	66	64	63	63
24	84	86	84	86	86	85	84	83	80	77	72	66	66	65
25	85	86	85	85	84	84	85	82	78	75	67	64	65	64
26	84	84	78	73	76	79	80	79	74	69	64	64	66	66
27	80	80	78	73	68	71	78	72	71	70	67	59	62	59
28	74	74	73	76	74	73	70	62	61	61	49	47	46	41
29	82	86	80	68	79	76	73	61	56	53	53	40	38	42
30	73	74	74	74	72	72	71	61	58	55	52	46	37	33
Mean . .	78·6	79·5	79·2	78·1	77·2	76·8	75·6	71·7	68·9	65·8	61·1	56·1	54·0	53·8
Mean Vapour Pressure in inches.	·752	·756	·743	·723	·705	·697	·686	·679	·686	·688	·679	·661	·668	·676

DECEMBER.

1	71	68	67	60	67	61	56	61	57	52	43	40	37	38
2	67	67	68	72	74	73	71	68	62	57	55	47	40	42
3	70	67	68	68	74	78	78	73	72	66	63	60	49	50
4	79	81	81	80	81	81	82	79	74	73	67	60	57	56
5	77	78	71	75	74	72	69	68	68	63	60	52	49	50
6	79	76	76	81	79	78	79	74	68	67	60	54	53	56
7	68	68	72	73	72	74	73	69	64	62	59	52	45	43
8	72	70	73	74	72	67	65	62	59	57	55	54	49	42
9	77	68	66	68	70	72	69	67	63	60	60	56	46	39
10	69	80	82	80	76	68	62	62	60	54	51	50	49	51
11	78	79	81	79	80	79	78	76	74	74	67	66	63	63
12	74	79	79	79	79	76	79	76	73	68	64	61	58	57
13	57	56	55	55	58	57	60	64	62	57	54	50	43	37
14	70	63	60	59	64	61	61	58	56	51	48	43	40	35
15	64	69	71	67	61	64	59	50	48	52	51	43	37	36
16	72	67	70	71	64	59	59	59	55	50	51	47	43	45
17	58	58	56	56	56	57	59	65	64	57	53	48	50	53
18	75	73	67	65	67	70	66	65	60	61	61	55	55	56
19	88	87	86	87	88	88	87	88	86	86	85	85	82	81
20	86	84	84	85	89	91	89	89	88	89	91	87	83	80
21	88	88	89	88	88	89	90	90	87	81	80	78	84	75
22	84	85	86	86	88	84	83	82	79	76	74	72	69	71
23	80	79	79	80	80	81	77	80	76	78	73	68	66	68
24	65	63	68	70	73	75	74	73	72	69	67	55	51	48
25	73	80	73	70	73	77	74	72	76	74	66	62	56	52
26	80	82	75	79	81	80	80	79	76	72	63	51	52	53
27	76	70	71	69	67	70	71	70	71	70	58	48	48	44
28	79	83	85	83	82	81	81	77	78	75	70	67	62	57
29	77	79	80	81	75	76	75	79	76	71	69	67	66	66
30	78	78	78	74	76	74	77	77	73	70	65	65	64	67
31	85	84	82	82	79	79	79	80	79	74	72	65	54	56
Mean . .	74·7	74·5	74.2	74·1	74·4	73·9	73·0	72·0	69·5	66·6	63·1	58·3	54·8	53·8
Mean Vapour Pressure in inches.	·620	·610	·599	·594	·591	·583	·572	·580	·590	·597	·607	·594	·590	·594

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.										Mean.	Mean Vapour Pressure in inche of mercury *	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
											"	
47	50	52	59	63	67	70	75	75	76	62·4	·663	1
49	50	54	60	68	73	76	78	78	74	66·3	·675	2
45	52	59	65	65	68	72	74	73	69	67·5	·676	3
53	53	57	63	67	70	72	72	75	72	67·0	·678	4
52	53	60	66	71	73	76	73	78	78	67·8	·697	5
49	55	60	65	68	69	74	76	80	79	62·3	·658	6
50	56	60	65	67	70	73	74	73	73	62·9	·649	7
49	56	62	68	72	72	74	75	76	76	64·7	·670	8
50	53	58	65	70	72	76	78	80	79	65·6	·668	9
48	55	61	67	70	72	75	78	75	72	66·5	.671	10
58	57	63	69	73	76	78	79	80	80	71·1	·727	11
67	70	68	69	74	76	80	82	84	84	76·5	·797	12
71	67	69	73	75	78	79	81	82	83	78·0	·795	13
67	67	72	74	75	74	75	78	80	84	77·7	·797	14
61	67	71	70	68	73	68	68	72	73	73·7	·756	15
69	69	73	77	80	82	83	84	85	83	75·9	·799	16
39	47	53	60	65	68	68	68	71	72	**59·5**	·634	17
54	56	61	66	69	68	69	70	69	69	62·3	·630	18
73	71	73	77	76	77	80	81	82	82	71·4	·754	19
65	70	72	77	80	82	82	82	84	84	78·0	·829	20
71	70	73	77	78	79	81	82	84	85	**79.6**	**·835**	21
64	62	60	60	63	63	69	71	76	76	74.8	·777	22
64	67	71	74	77	79	80	83	82	82	75·2	·771	23
65	65	70	75	79	82	83	83	85	82	78·0	·834	24
61	66	71	75	79	81	80	81	84	84	77·0	·818	25
69	64	67	69	72	73	69	72	79	83	73·0	·776	26
60	62	65	70	74	69	66	69	70	69	69.2	·765	27
37	47	61	65	70	73	70	74	77	79	63·9	·708	28
44	47	51	60	60	**63**	67	69	69	74	62·1	·641	29
37	46	53	57	64	62	62	64	69	66	59·7	**·603**	30
56·3	59·0	63·3	67·9	71·1	72·8	74·2	75·8	77·6	77·4	69·7	·725	Mean.
·701	·718	·732	·745	·760	**·766**	·766	·765	·762	·743	·719		Mean Vapour Pressure in inches.

DECEMBER.

38	40	47	55	62	64	65	64	70	69	56·3	.548	1
45	43	47	50	57	60	63	59	62	68	59·0	·568	2
51	52	53	57	63	69	74	75	77	79	66·1	·614	3
57	56	60	66	71	74	76	75	78	81	71·9	·677	4
50	50	53	61	70	74	74	68	72	75	65·5	·615	5
57	57	61	66	67	70	69	65	69	71	68·0	·642	6
36	45	51	61	66	71	67	64	64	65	61·8	·551	7
47	49	54	61	65	67	68	68	65	74	62·0	·591	8
44	42	49	56	65	66	68	73	74	70	62·0	·580	9
50	47	52	59	61	64	67	70	77	77	63·3	·584	10
62	61	62	64	71	72	73	76	74	73	71·9	·655	11
56	54	56	60	61	60	55	56	55	57	65·5	·602	12
33	45	60	64	66	68	70	69	71	71	57·6	·542	13
33	37	50	56	62	67	63	64	64	58	**55·1**	.522	14
33	43	47	58	63	68	68	69	66	67	56·4	·522	15
49	57	64	67	73	73	69	60	59	59	60·1	·529	16
58	61	67	72	72	68	69	69	70	71	61·1	·577	17
59	64	67	71	77	75	72	75	74	83	67·2	·696	18
79	77	78	80	82	82	82	82	81	84	83·8	·766	19
79	79	79	82	85	85	86	86	86	86	**85·3**	**·790**	20
73	74	76	78	79	79	79	80	82	82	82·4	·743	21
72	73	76	81	82	82	84	85	85	82	80·0	·729	22
64	64	67	71	69	65	63	69	67	68	72·2	·634	23
50	50	54	59	61	63	68	66	68	66	63·7	·525	24
52	54	61	67	72	73	73	70	75	77	68·8	·586	25
54	51	56	62	64	64	60	60	63	70	67·0	·584	26
45	49	57	58	63	69	75	80	81	79	65·0	·573	27
59	61	66	71	73	69	65	68	75	77	72·7	·622	28
66	67	69	72	74	74	74	77	79	79	73·7	·618	29
68	69	73	76	79	81	81	82	81	83	74·5	·616	30
56	55	55	58	64	70	75	76	73	79	71·3	·593	31
54·0	55·7	60·2	65·1	69·0	70·5	70·8	71·0	72·2	73·5	67·5	·614	Mean.
·603	·611	·629	·646	·660	**·664**	·651	·634	·621	·618	·611		Mean Vapour Pressure in inches.

*Computed from mean temperatures and mean relative humidities.

Notation :—H=High clouds (Ci, Ci-S.) ; M=Medium clouds

JANUARY.

Date.	Cloud Forms (coming from)									Cloud Amounts (All Forms).					
	8½h.			12½h.			16½h.								
	H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.
1	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
2	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
3	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
4	W	..	..	SW	..	..	SW	..	..	2	3	1	4	8	6
5	SW	..	..	W	..	..	..	..	..	3	5	1	1	0	0
6	SW	..	..	W	..	..	SW	..	..	4	7	8	5	3	0
7	W	..	..	SW	..	..	SW	..	..	0	1	1	1	7	8
8	SW	..	..	SW	..	..	SW	..	..	6	9	7	8	9	7
9	E	..	..	W	..	..	SE	..	..	1	1	0	3	3	1
10	SW	..	..	SW	..	..	S	..	..	2	5	8	6	5	0
11	SW	..	..	SW	..	..	SW	..	..	6	8	4	8	6	2
12	SW	..	..	S	..	..	W	..	..	2	3	2	1	3	1
13	WSW	..	..	SW	..	..	SW	..	..	3	7	7	6	5	9
14	SE	..	..	..	..	..	..	..	..	2	2	1	0	0	0
15	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
16	..	..	..	..	..	..	..	..	..	0	0	0	0	6	0
17	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
18	..	..	..	SE	..	..	S	..	..	0	0	0	1	2	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
20	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
21	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
23	E	..	..	SW	..	..	..	..	..	2	1	2	3	0	0
24	..	..	..	SE	..	..	..	..	..	1	0	0	trace	0	0
25	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
26	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
27	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
28	..	..	..	..	..	SW	..	..	E	0	0	3	4	2	1
29	..	S	NE	..	..	NE	..	SW	..	3	2	1	2	1	0
30	..	SSW	S	..	..	S	..	..	SW	2	3	1	3	1	0
31	..	SW	..	..	..	E	S	..	..	6	7	1	2	5	0
Mean cloud of month.										1·5	2·1	1·5	1·9	1·9	1·1

MARCH.

1	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
2	..	..	..	..	..	..	..	..	..	1	0	0	0	0	0
3	..	S	..	..	..	S	..	..	SW	trace	2	8	1	trace	4
4	W	..	..	..	..	..	..	..	..	0	1	trace	0	0	0
5	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
6	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
7	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
8	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
9	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
10	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
11	..	..	..	..	..	..	..	..	..	6	0	0	0	0	0
12	..	..	..	..	..	..	..	..	..	0	0	0	0	0	1
13	..	..	..	..	..	..	..	..	NE	0	0	0	0	1	trace
14	W	..	..	..	..	NE	..	..	NE	2	1	1	1	1	trace
15	..	..	W	..	..	S	..	..	NW	9	7	3	trace	1	1
16	..	..	NE	..	..	E	..	..	E	1	trace	trace	trace	1	0
17	..	..	..	..	..	..	..	..	..	0	0	1	0	0	0
18	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	1	0	0	0	0	0
20	..	..	SW	..	..	SSW	..	..	..	1	2	3	1	0	0
21	..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
23	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
24	..	..	W	..	..	..	..	..	..	4	3	2	0	0	0
25	..	..	NNW	..	..	NW	..	..	..	2	3	3	1	0	0
26	..	..	..	..	..	..	..	..	..	0	0	4	0	0	0
27	..	..	NW	..	..	..	..	..	..	1	0	1	0	0	0
28	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
29	..	..	..	..	..	..	..	..	E	0	0	0	0	trace	1
30	..	..	..	..	..	..	..	..	..	0	0	0	0	0	2
31	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
Mean cloud of month.										0·9	0·6	0·8	0·1	0·1	0·3

(Ci-Cu, A-Cu, A-S) ; L=Low clouds (Cu, Cu-N, S, N). . . =No cloud.

FEBRUARY.

Cloud Forms (coming from)									Cloud Amounts (All Forms).						Date.
8½h.			12½h.			16½h.									
H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.	
SW	..	..	S	SW	..	SE	S	..	2	3	4	5	4	1	1
..	..	..	..	..	E	..	..	E	0	0	0	1	trace	0	2
SW	..	..	..	..	..	..	..	..	2	1	0	0	0	0	3
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	4
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	5
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	6
W	..	..	SW	..	..	E	..	..	2	4	2	2	trace	0	7
W	..	..	SW	..	..	..	..	..	2	7	5	4	0	0	8
W	..	..	W	..	..	NW	..	..	0	1	1	trace	2	0	9
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	10
W	..	..	W	..	..	W	..	..	1	1	4	7	8	9	11
..	..	..	..	..	..	NW	..	..	0	0	0	0	4	0	12
S	..	..	SW	..	..	W	..	..	1	2	6	3	2	0	13
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	14
..	..	..	..	..	..	..	..	..	4	0	2	0	0	0	15
SW	..	..	W	..	..	W	..	..	6	2	4	1	4	0	16
..	..	..	SW	..	..	W	..	..	2	0	0	1	5	0	17
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	18
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	19
SE	..	W	..	..	WSW	..	..	..	2	1	2	2	0	0	20
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	21
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	22
..	..	N	..	..	W	..	..	W	1	1	1	1	1	3	23
W	..	NW	..	WSW	..	..	..	W	5	7	4	9	7	1	24
SW	..	W	..	SW	NE	..	W	NE	1	3	3	4	3	0	25
..	..	N	..	..	..	..	..	E	1	trace	2	0	1	0	26
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	27
..	..	..	..	..	..	..	..	NE	0	0	0	0	1	0	28
									1·2	1·2	1·4	1·4	1·5	0·5	Mean cloud of month.

APRIL.

..	..	SW	..	..	..	..	..	..	2	1	2	0	0	0	1
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	2
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	3
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	4
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	5
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	6
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	7
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	8
..	..	..	..	..	..	..	..	..	0	0	0	0	0	1	9
..	SW	..	..	..	E	..	..	..	2	1	1	1	0	5	10
..	..	SW	..	..	SW	..	..	NE	5	3	5	5	2	0	11
..	..	SW	..	..	SW	..	..	SE	4	2	3	3	trace	5	12
..	..	SW	..	..	SW	..	..	SW	4	3	5	5	6	4	13
..	..	SW	..	..	W	..	..	W	4	3	3	2	7	trace	14
..	..	E	..	..	SSW	..	..	SW	3	1	2	4	5	0	15
..	..	NE	..	..	..	..	..	..	2	1	4	0	0	2	16
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	17
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	18
..	..	S	..	..	..	..	..	..	3	4	1	0	0	0	19
..	..	S	..	..	..	W	..	..	1	2	0	0	1	2	20
..	..	E	W	..	..	..	W	..	1	trace	0	trace	2	0	21
..	SW	..	..	SW	..	..	..	..	4	3	3	1	0	0	22
..	..	W	..	S	E	SW	..	..	1	3	1	3	trace	0	23
..	..	W	..	..	..	..	..	..	2	3	trace	0	0	0	24
..	..	W	..	..	..	..	..	..	2	trace	0	0	0	0	25
..	..	NNE	..	..	W	..	..	SW	3	4	2	1	trace	0	26
..	..	WSW	..	..	E	..	..	SW	3	2	2	trace	1	0	27
..	..	NNE	SW	..	N	W	..	..	4	3	4	3	2	0	28
..	..	NW	..	..	..	..	..	..	2	3	2	0	0	1	29
..	..	..	..	..	NE	..	..	W	trace	2	1	trace	2	3	30
									1·8	1·5	1·4	0·9	0·9	0·8	Mean cloud of month.

Notation :—H=High clouds (Ci, Ci-S) ; M=Medium clouds

MAY.

Day.	Cloud forms (coming from)									Cloud amount (all forms).					
	8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	16½h.	22h.
	H.	M.	L.	H.	M.	L.	H.	M.	L.						
1	..	..	E	..	..	..	..	..	W	2	trace	trace	trace	1	7
2	..	..	NW	..	..	NW	..	..	W	5	1	2	trace	1	2
3	..	..	NW	..	S	WNW	N	..	E	3	5	1	5	2	5
4	..	..	NW	..	..	..	..	..	NE	1	1	1	0	1	3
5	..	..	W	..	..	..	..	..	NE	2	1	1	0	1	4
6	..	..	WNW	..	..	..	..	..	E	3	4	2	0	1	3
7	..	..	WSW	..	..	..	..	..	E	1	6	1	0	1	2
8	..	..	N	..	..	..	..	..	..	3	2	2	0	0	0
9	..	..	W	..	..	..	..	..	..	3	7	2	0	0	1
10	..	..	N	..	..	..	..	..	NE	3	4	0	0	3	2
11	..	..	N	..	..	..	..	..	E	2	3	1	0	1	8
12	..	..	SSE	S	..	E	..	..	E	7	10	8	2	2	3
13	..	..	NE	..	..	E	..	SE	E	6	5	4	2	7	5
14	..	..	N	..	..	..	S	..	..	6	7	1	1	4	5
15	..	..	ESE	..	..	SE	..	SE	..	10	10	10	10	10	trace
16	..	S	..	..	..	..	..	..	..	4	9	9	9	10	10
17	..	..	S	..	..	S	..	..	S	8	9	10	8	10	10
18	..	..	S	SSE	..	SW	..	..	SSW	10	10	8	7	6	7
19	SE	..	SSW	SSE	..	..	..	..	SW	3	5	9	9	10	6
20	SE	..	..	..	..	SW	..	..	W	4	3	4	8	4	1
21	..	..	W	..	..	WSW	..	..	W	4	6	4	3	1	4
22	..	..	SW	ESE	..	..	SE	..	..	5	6	7	3	1	1
23	SE	..	N	SE	..	..	ESE	..	..	3	5	2	8	8	3
24	..	..	..	ESE	..	W	SE	..	..	8	6	7	9	8	2
25	SE	..	..	SE	..	..	..	..	WSW	5	4	3	7	6	3
26	..	..	WSW	SE	..	WSW	..	..	..	3	4	3	4	trace	1
27	..	..	W	SE	..	..	..	..	..	5	4	4	3	1	1
28	..	..	NW	..	..	..	..	..	..	3	5	4	1	10	10
29	..	E	..	..	E	..	..	..	NW	10	8	8	9	10	10
30	..	..	NW	E	..	W	E	..	W	10	10	10	6	6	10
31	..	E	..	..	E	..	..	..	WNW	4	10	7	6	10	10
Mean cloud of month.										4·7	5·5	4·4	3·9	4·4	4·5

JULY.

1	..	..	..	NE	..	..	..	E	W	5	10	8	9	8	6
2	..	..	W	..	..	W	..	..	WSW	7	6	5	4	7	8
3	..	..	W	..	..	..	..	..	SW	8	4	4	2	9	5
4	..	..	W	..	..	..	..	..	SW	7	2	4	2	8	10
5	NE	SW	..	..	..	W	..	..	SW	5	7	6	4	8	10
6	..	E	SW	..	..	WNW	..	WSW	W	8	6	10	5	7	8
7	..	NE	SW	..	..	W	..	E	W	8	6	7	3	9	7
8	..	..	..	..	..	W	..	..	W	10	10	10	10	10	10
9	..	..	W	..	NE	..	..	NE	W	5	5	6	10	10	7
10	..	..	SW	..	..	WSW	..	..	W	9	10	10	10	10	10
11	..	..	WSW	..	..	W	..	..	W	8	5	5	4	6	4
12	..	ENE	..	..	SW	W	..	..	W	10	10	6	4	9	10
13	..	..	W	..	..	..	..	..	W	6	10	10	10	5	10
14	..	..	..	..	..	..	..	..	W	10	10	10	10	10	10
15	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
16	..	..	W	..	..	..	..	..	W	10	10	10	10	10	10
17	E	..	W	..	SW	SW	..	..	W	8	3	4	5	10	10
18	..	..	SW	..	..	W	..	..	SW	10	8	10	9	10	10
19	..	..	SW	..	NE	SW	..	..	SW	10	10	10	7	10	6
20	..	..	SW	NE	..	..	..	..	SW	10	10	10	8	9	6
21	NE	..	SW	..	..	SW	NE	..	SW	5	6	4	2	6	4
22	..	..	..	..	..	W	E	..	W	3	3	4	3	5	4
23	E	..	..	..	..	W	..	..	W	6	3	4	2	6	7
24	..	..	WSW	..	..	W	..	..	SW	8	9	8	10	10	10
25	..	W	..	..	..	W	..	..	W	10	10	10	10	9	8
26	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
27	..	..	..	..	..	W	..	..	W	10	10	10	10	10	10
28	..	..	WSW	..	..	N	..	SW	W	10	10	10	10	8	9
29	..	..	W	..	..	..	..	..	W	9	8	10	10	10	10
30	..	..	W	..	..	..	..	..	W	10	10	10	10	10	10
31	..	..	W	..	..	..	..	..	W	10	10	10	10	10	10
Mean cloud of month.										8·2	7·8	7·9	7·2	8·7	8·4

(Ci-Cu, A-Cu, A-S); L=Low clouds (Cu, Cu-N, S, N);..=No cloud.

JUNE.

Cloud forms (coming from)									Cloud amount (all forms).						Date.
8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	16½h.	22h.	
H.	M.	L.	H.	M.	L.	H.	M.	L.							
..	..	SE	..	..	..	..	..	SE	10	10	10	10	10	10	1
..	..	NNW	..	..	..	..	..	SSE	10	9	8	10	10	10	2
..	SW	..	..	SW	..	N	NW	SW	9	8	10	9	8	6	3
..	WNW	W	..	WNW	SW	..	..	W	3	7	3	7	4	4	4
..	..	SW	..	..	..	..	..	SW	4	5	3	0	3	2	5
..	..	SW	..	..	SW	..	..	WSW	4	5	3	1	3	4	6
E	..	SW	E	..	SW	..	SW	SW	7	5	3	2	6	4	7
..	..	NW	..	SW	..	..	..	W	8	7	2	4	1	3	8
..	..	SW	E	..	WSW	..	..	SW	5	2	3	2	1	2	9
..	SSW	WSW	..	S	W	..	SE	W	5	8	5	6	7	5	10
..	..	W	..	ESE	WNW	..	SE	WSW	6	7	5	4	3	2	11
E	..	W	E	..	W	..	..	W	7	6	4	6	1	2	12
..	..	WNW	..	..	W	..	..	WNW	9	7	3	2	3	2	13
ESE	..	SSW	..	..	WSW	..	..	W	7	4	7	3	6	7	14
E	S	W	..	E	..	..	E	W	6	7	5	4	6	10	15
..	..	SW	..	E	SW	..	..	WSW	9	8	7	9	5	10	16
E	..	SW	..	ENE	S	..	E	SW	8	10	8	9	10	10	17
..	..	SSW	E	E	S	..	..	S	7	9	5	9	9	5	18
.	..	S	E	..	..	E	SE	..	7	10	8	9	10	2	19
..	..	S	..	..	S	..	..	SW	7	10	10	9	9	10	20
..	..	SW	..	..	SSW	..	..	SW	10	10	10	10	10	10	21
..	..	S	..	..	SW	..	..	SSW	10	10	10	10	10	10	22
..	..	SW	..	..	SW	..	..	SW	10	9	8	9	10	10	23
..	..	W	..	..	..	..	..	WSW	10	10	10	10	10	10	24
..	..	W	..	..	W	..	..	W	10	10	10	8	10	10	25
..	..	W	..	..	W	..	..	W	10	7	10	8	10	10	26
..	..	W	..	..	W	..	..	WSW	10	10	10	10	10	10	27
..	..	SW	..	..	..	..	..	W	9	3	10	10	10	8	28
..	..	..	..	..	..	..	..	SW	9	2	3	1	9	8	29
E	..	..	..	E	W	..	SW	W	8	6	10	6	8	7	30
									7·8	7·4	6·8	6·6	7·1	6·8	Mean cloud of month.

AUGUST.

..	..	..	..	..	..	..	..	..	10	10	10	10	10	10	1
..	..	..	..	..	..	..	..	W	10	10	10	10	10	10	2
..	..	..	..	..	..	..	..	W	10	10	10	10	10	10	3
..	..	..	..	..	..	..	..	..	10	10	10	10	10	10	4
..	..	..	..	..	..	..	W	WSW	10	10	10	10	9	10	5
..	..	SW	..	WSW	WSW	..	..	W	8	7	6	6	5	7	6
..	..	SW	..	..	WSW	..	..	W	7	8	8	7	10	8	7
..	..	WSW	..	NW	W	..	..	W	4	10	7	9	9	3	8
..	..	..	..	..	..	..	..	W	10	10	10	10	8	10	9
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	10
..	..	W	..	SW	WSW	..	..	W	10	10	10	9	4	10	11
..	..	SW	..	..	SW	..	..	WSW	7	5	3	2	4	10	12
..	..	SW	..	W	W	..	W	W	3	8	2	10	10	4	13
..	..	SW	..	..	SW	..	..	W	4	9	8	4	10	8	14
..	..	W	..	WSW	..	ESE	..	W	8	9	6	9	5	7	15
..	WSW	W	..	..	W	..	..	SW	9	10	10	10	10	2	16
..	..	W	..	..	W	..	..	W	7	10	3	9	2	4	17
..	..	W	..	..	W	E	..	W	10	10	9	6	4	2	18
..	..	W	..	..	S	N	..	W	9	10	8	7	7	2	19
..	..	WSW	..	..	SE	WNW	..	WNW	7	9	8	3	3	3	20
..	..	WNW	..	..	NW	..	..	SE	10	10	8	10	10	10	21
..	..	SSE	ESE	S	..	..	..	..	9	8	6	5	10	10	22
ENE	..	..	NE	SSE	..	..	W	SW	10	6	7	6	9	10	23
..	..	S	..	..	SSW	..	SE	..	7	7	6	5	10	10	24
..	..	W	..	..	..	..	..	.	9	10	10	10	10	10	25
..	E	..	NE	..	SW	NE	..	WSW	10	8	6	5	7	4	26
..	..	W	NW	W	W	..	..	W	9	3	4	7	9	4	27
..	..	W	..	..	..	..	..	W	5	7	9	1	10	7	28
..	..	W	..	..	..	NW	..	W	6	3	4	3	8	4	29
..	..	..	..	..	W	E	..	..	8	2	3	7	7	7	30
..	W	SW	..	..	SW	NE	E	W	6	4	4	9	6	2	31
									8·1	8·2	7·3	7·4	7·9	7·0	Mean cloud of month.

Notation :—H=High clouds (Ci, Ci-S); M=Medium clouds.

SEPTEMBER.

Date.	Cloud Forms (coming from)									Cloud Amount (All Forms).					
	8½hrs.			12½hrs.			16½hrs.								
	H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h	22h.
1	..	..	W	..	..	W	..	..	W	4	3	2	3	8	7
2	..	..	WNW	..	..	SW	†	†	†	8	3	3	7	†	†
3	..	..	W	..	..	W	†	†	†	5	8	†	4	7	10
4	..	..	NE	..	E	..	..	SE	..	10	6	8	5	6	10
5	..	..	N	..	..	E	..	..	..	10	10	10	7	10	10
6	ESE	E	..	..	E	..	..	..	NE	9	5	7	9	10	10
7	..	..	E	..	..	E	..	..	..	9	9	7	6	10	10
8	..	N	NE	..	..	SE	..	..	N	9	6	9	5	10	10
9	..	..	SE	..	..	NNW	..	..	..	9	10	8	9	10	10
10	..	..	S	SE	SSE	S	NNE	..	S	10	9	10	7	8	9
11	..	..	..	..	..	..	..	..	..	10	10	10	10	10	10
12	..	..	..	..	SW	W	..	..	..	10	10	10	10	10	10
13	..	..	S	..	..	S	..	..	S	7	8	7	5	10	2
14	..	..	SSW	..	S	S	..	..	S	8	10	10	10	6	3
15	..	..	..	..	..	..	..	..	..	10	10	10	10	10	10
16	..	..	SW	..	..	SW	..	..	SW	8	7	8	10	8	10
17	..	..	..	..	..	W	..	..	W	10	10	10	10	10	10
18	..	..	W	..	..	W	..	..	WSW	10	10	10	10	10	8
19	..	..	W	..	WSW	..	..	..	SW	5	2	2	10	3	7
20	NE	..	..	..	W	..	..	..	W	4	2	3	5	6	3
21	..	..	W	ESE	W	W	..	..	W	5	6	3	6	4	2
22	..	..	E	S	WNW	..	..	..	W	10	5	7	8	5	3
23	..	..	W	..	..	W	..	..	W	9	4	2	5	3	3
24	..	..	W	..	..	W	..	..	W	7	10	7	8	10	4
25	..	..	W	..	..	W	..	..	W	4	3	2	4	3	2
26	..	..	..	..	..	..	..	..	..	2	1	1	2	trace	4
27	..	..	..	..	SW	..	..	..	..	2	1	2	1	trace	0
28	..	..	SE	..	..	..	..	..	..	7	1	trace	trace	tarce	0
29	.	E	..	..	..	..	..	SE	..	trace	trace	2	trace	8	10
30	..	E	..	..	ESE	..	E	..	E	10	9	6	7	4	10
Mean cloud of month.										7·4	6·3	6·1	6·4	6·9	6·8

NOVEMBER.

1	..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0
2	..	..	..	..	..	..	..	..	..	0	0	0	0	trace	0
3	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
4	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
5	..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0
6	..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0
7	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
8	SSE	..	..	..	..	..	SSE	..	..	3	trace	2	2	2	0
9	SSE	..	..	SW	..	..	SE	..	..	6	7	5	7	6	2
10	..	..	..	..	..	..	..	..	..	2	1	1	1	2	0
11	SW	..	..	..	..	..	..	..	..	2	1	1	2	1	0
12	..	S	..	W	..	..	SE	..	..	2	3	1	3	2	2
13	SSW	..	..	W	..	..	SSW	..	..	6	5	5	7	3	0
14	S	..	S	..	SE	..	SSE	..	..	2	4	4	4	2	1
15	..	SW	..	W	..	..	..	..	..	2	7	8	9	9	1
16	S	..	..	..	..	..	..	..	..	3	5	2	1	trace	5
17	..	SSE	..	SE	..	..	SE	..	..	6	9	8	9	7	6
18	..	SW	..	S	..	..	SE	..	..	9	9	8	8	3	5
19	..	..	SSW	..	..	SSW	..	..	SSE	3	9	6	8	9	7
20	..	SE	..	..	..	..	..	..	..	5	3	2	3	3	1
21	..	..	..	..	..	..	..	..	..	2	trace	1	1	1	0
22	..	..	..	..	..	..	..	..	..	1	1	3	1	trace	0
23	..	..	..	..	..	..	..	..	..	0	0	0	1	1	0
24	..	..	..	..	..	..	..	..	..	0	0	0	1	1	2
25	..	..	..	..	..	..	..	..	..	1	trace	0	1	1	5
26	WSW	..	..	SSW	..	..	SW	..	..	6	2	3	4	8	3
27	..	..	..	SSW	..	..	WSW	..	..	2	1	2	3	4	6
28	SW	..	..	..	..	..	..	..	..	2	1	4	1	0	0
29	..	..	..	..	..	..	SW	..	..	0	0	0	trace	1	0
30	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
Mean cloud of month.										2·2	2·3	2·2	2·6	2·2	1·5

† No observations.

(Ci-Cu, A-Cu, A-S); L=Low clouds (Cu, Cu-N, S, N); · · =No cloud.

OCTOBER.

Cloud Forms (coming from)									Cloud Amount (All Forms).						Date.
8½hs.			12½hs.			16½hs.									
H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.	
..	..	ESE	..	..	..	..	..	SE	9	7	6	3	9	10	1
..	E	..	..	..	..	..	..	..	8	3	1	1	9	10	2
..	..	..	..	..	..	..	..	E	1	trace	0	1	8	5	3
..	E	..	..	SE	NE	..	..	..	8	9	6	7	1	6	4
..	..	..	..	..	..	..	..	SE	1	1	trace	3	10	10	5
E	ENE	..	NE	..	..	..	..	E	6	3	4	4	8	10	6
..	E	..	..	..	..	..	..	SE	9	trace	0	trace	3	8	7
E	..	..	SE	..	..	SE	..	..	2	3	5	9	5	10	8
SE	..	..	SE	..	..	SE	..	E	9	8	7	8	3	3	9
SE	SE	E	..	..	..	SE	..	..	7	6	4	2	3	10	10
..	..	..	..	..	..	..	..	..	3	1	trace	trace	trace	0	11
SE	..	..	..	..	..	..	..	..	3	2	trace	trace	trace	2	12
SE	..	..	..	..	..	..	E	..	7	4	1	1	3	6	13
..	E	..	..	E	..	..	..	E	8	7	3	4	9	10	14
..	..	E	..	E	..	..	E	E	9	10	6	10	9	10	15
..	E	..	..	E	..	E	..	..	8	7	5	7	3	0	16
SE	..	..	SE	..	..	..	..	..	4	3	1	1	1	1	17
E	..	..	ESE	..	..	..	..	..	4	2	4	5	trace	6	18
..	..	..	..	..	..	..	..	..	1	trace	trace	2	2	7	19
..	..	WSW	..	..	E	..	..	S	8	9	8	6	7	5	20
..	..	SE	..	SW	..	..	SW	..	10	9	10	10	10	10	21
..	E	..	..	S	..	..	..	SE	6	10	10	10	9	9	22
..	SE	..	..	SSE	NE	..	SE	..	10	6	8	6	2	2	23
..	E	..	..	..	..	..	..	..	1	1	0	0	trace	7	24
..	..	..	..	..	..	..	..	E	3	1	4	1	trace	4	25
SSE	..	..	..	..	..	SE	..	..	1	1	trace	trace	trace	2	26
..	..	..	..	..	..	..	..	..	5	1	1	trace	trace	2	27
S	..	..	..	..	..	S	..	..	2	3	1	trace	trace	0	28
..	..	..	..	..	..	..	..	..	1	trace	trace	1	trace	0	29
..	..	..	..	..	..	..	..	..	1	trace	trace	trace	0	0	30
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	31
									5·0	3·8	3·1	3·3	3·7	5·3	Mean cloud of month.

DECEMBER.

SW	..	..	..	..	..	..	..	..	2	trace	0	1	trace	0	1
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	2
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	3
NW	..	..	SW	..	..	..	..	..	1	6	4	6	trace	1	4
W	..	..	SW	..	..	SW	..	..	7	8	8	6	3	0	5
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	6
..	..	..	WSW	..	..	..	..	..	0	2	1	4	2	0	7
..	..	..	..	..	..	SW	..	..	1	0	trace	1	2	0	8
..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0	9
..	..	..	..	..	..	WSW	..	..	trace	0	0	0	2	0	10
..	..	..	SW	..	..	SW	..	..	1	trace	2	3	4	0	11
SW	..	..	..	..	NW	..	..	..	trace	1	3	2	trace	0	12
..	..	..	..	..	..	..	..	..	trace	trace	0	0	0	0	13
..	..	..	..	..	..	..	..	..	trace	0	0	0	0	0	14
..	..	..	..	..	..	SW	..	..	0	1	2	2	6	1	15
SW	..	..	SW	..	..	SW	..	..	1	6	7	9	9	2	16
SW	..	..	SW	..	..	WSW	..	..	2	3	5	2	3	4	17
..	SE	..	..	SE	..	..	SE	..	9	9	4	4	9	10	18
..	..	SE	..	..	SE	SE	..	S	10	10	10	10	9	10	19
..	..	SE	..	NW	N	..	..	..	10	10	9	7	3	0	20
..	..	..	..	..	..	..	..	..	trace	trace	0	1	1	0	21
SW	..	S	WSW	..	..	..	..	..	6	3	1	3	1	0	22
..	SSW	..	..	SW	..	..	..	SW	trace	5	1	3	2	0	23
..	..	..	..	..	..	..	..	..	0	0	0	0	trace	0	24
..	..	..	..	..	..	..	..	..	1	1	2	1	trace	0	25
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	26
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	27
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	28
SW	..	..	..	..	..	..	..	..	trace	1	trace	trace	0	0	29
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	30
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	31
									1·6	2·1	1·9	2·1	1·8	0·9	Mean cloud of mouth.

Month.	Hours (B.M.T.).													Bright Sunshine.	
	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	Average per day.	Greatest number of hours in a day.
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
January . .	0·09	0·92	0·99	0·99	0·99	1·00	0·98	1·00	1·00	0·96	0·90	0·10	..	9·9	10·4
February . .	0·25	0·95	0·99	1·00	0·98	0·96	0·97	0·97	0·95	0·97	0·94	0·22	..	10·2	10·8
March . .	0·06	0·83	1·00	0·97	0·99	1·00	1·00	1·00	1·00	1·00	1·00	0·29	..	10·1	11·4
April . .	0·40	0·98	0·98	0·98	1·00	0·99	1·00	1·00	1·00	0·99	0·99	0·73	..	**11·0**	11·6
May . .	0·37	0·70	0·70	0·84	0·83	0·84	0·89	0·88	0·89	0·83	0·73	0·55	..	9·1	**11·7**
June . .	0·10	0·37	0·51	0·50	0·55	0·61	0·56	0·56	0·56	0·53	0·48	0·25	..	5·6	11·4
July . .	0·05	0·26	0·41	0·41	0·36	0·45	0·40	0·41	0·35	0 29	0·15	0·06	..	3·6	10·7
August . .	0·00	0·19	0·31	0.40	0·43	0·40	0·44	0·44	0·47	0·41	0·26	0·01	..	3·8	9·9
September .	0·02	0·38	0·58	0·65	0·61	0·65	0·73	0·70	0·61	0·53	0·35	0·00	..	5·8	10·1
October . .	0·17	0·68	0·78	0·83	0·85	0·84	0·85	0·87	0·89	0 83	0·66	0·02	..	8·3	10·6
November . .	0.34	0·90	0·96	0·94	0·95	0 97	0·97	0·97	0·90	0·94	0·89	0·02	..	9·7	10·6
December . .	0·02	0·85	0·93	0·92	0·93	0·95	0.96	0·94	0·93	0·92	0·79	0·01	..	9·3	10·4
Mean . .	**0·16**	0·67	0·76	0·79	0·79	0·81	**0·81**	0·81	0·80	0·77	0·68	0·19	..	8·0	..

* From Campbell-stokes Sunshine Recorder.

MAGNETIC TABLES.

(ALIBAG OBSERVATORY.)

Diurnal variation of magnetic elements.

The following tables give the diurnal variation of declination (D), horizontal component of the force (H), the easterly component (Y), the vertical component (Z), the inclination (I) and the total force (F) for each month based on the hourly tabulations for the 5 international quiet days. Owing to very small value of D the variation tables of H and the northerly component of the force (X) are practically the same. No separate table for $\triangle$ X has consequently been given. The days are reckoned from 4 h. 51 m. to 3 h. 51 m. of the local mean time corresponding to the Greenwich civil day 0 h. to 23 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulæ:

$$\begin{aligned}
\triangle X &= 1{\cdot}000\ \triangle H + 0{\cdot}046\ \triangle D \\
\triangle Y &= -0{\cdot}005\ \triangle H + 10{\cdot}883\ \triangle D \\
\triangle I &= 0{\cdot}075\ \triangle Z - 0{\cdot}036\ \triangle H \\
\triangle F &= 0{\cdot}903\ \triangle H + 0{\cdot}431\ \triangle Z
\end{aligned}$$

A *plus* sign indicates an hourly value greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns:—I January, February, November, December: II March, April, September, October; III May, June, July, August.

All diurnal inequalities have been corrected for the aperiodic change by the formula $\frac{N(12-n)}{24}$ where 'N' denotes the excess at the second midnight of the representative day as compared to the first midnight, and 'n' denotes any hour of the day reckoned from 0 (first midnight to 24).

The actual non-cyclic corrections applied, namely, $a_{24} - a_0$, in the different months of the year have been given under the respective columns of the tables for $\triangle$D, $\triangle$H and $\triangle$Z.

The "allowance for the use of the means", which is given by $u_p = m_p + \frac{1}{12}\left(m_p - \frac{m_{p+1} + m_{p-1}}{2}\right)$, where u_p is the true ordinate and m_{p-1}, m_p, m_{p+1} the successive mean ordinates, is very small and less than 1γ in the case of H and V and 0·1 minute of arc in the case of D. Although small, the corrections have been used in determining the last significant figure in the following variation tables.

133518

DIURNAL VARIATION OF D, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·5	−0·4	−0·2	+0·3	+0·5	+0·5	+0·6	+0·6	+0·3	0·0	−0·4	−0·4	−0·4	+0·1	+0·6	+0·1
1	−0·7	−0·4	−0·3	+0·6	+1·2	+1·4	+1·3	+1·3	+0·7	0·0	−0·5	−0·5	−0·5	+0·3	+1·3	+0·4
2	−0·8	−0·4	−0·2	+1·6	+2·1	**+2·3**	+2·3	+2·3	+1·9	+0·5	**−0·6**	**−0·6**	**−0·6**	+0·9	+2·2	+0·9
3	−0·4	+0·1	+0·5	**+2·1**	**+2·2**	+2·2	**+2·5**	**+2·5**	**+2·6**	**+0·7**	−0·3	−0·5	−0·3	**+1·5**	**+2·3**	**+1·2**
4	+0·5	+0·6	**+0·9**	+1·6	+1·6	+1·3	+1·6	+1·7	+2·0	+0·3	0·0	+0·3	+0·4	+1·2	+1·6	+1·1
5	**+0·8**	**+0·6**	+0·7	+0·7	−0·1	+0·1	+0·5	+0·2	+0·2	−0·5	0·0	+0·6	**+0·5**	+0·3	+0·2	+0·3
6	+0·6	+0·1	+0·3	−0·5	−1·4	−1·1	−0·9	−1·4	−1·3	**−1·3**	−0·5	−0·1	0·0	−0·7	−1·2	−0·7
7	+0·2	**−0·6**	−0·4	−1·8	−2·4	−1·7	−2·3	−2·3	−2·3	−1·2	−0·5	−0·6	−0·4	−1·4	−2·2	−1·3
8	+0·2	−0·5	**−0·9**	**−2·2**	**−2·6**	**−1·8**	**−2·8**	**−2·5**	**−2·5**	−0·9	0·0	−0·3	−0·1	**−1·6**	**−2·4**	**−1·4**
9	0·0	0·0	−0·6	−1·9	−1·8	−1·4	−2·3	−2·1	−2·1	−0·3	+0·3	+0·2	+0·1	−1·2	−1·9	−1·0
10	−0·1	+0·3	−0·1	−1·1	−0·9	−0·8	−1·5	−1·5	−1·1	+0·3	+0·3	+0·3	+0·2	−0·5	−1·2	−0·5
11	+0·1	+0·6	+0·3	−0·3	0·0	−0·1	−0·5	−0·5	−0·1	+0·5	+0·3	**+0·6**	+0·4	+0·1	−0·3	+0·1
12	+0·2	+0·5	+0·2	+0·1	+0·4	+0·1	+0·3	0·0	+0·4	+0·3	+0·3	+0·5	+0·4	+0·2	+0·2	+0·3
13	+0·1	+0·2	0·0	+0·1	+0·3	−0·2	+0·4	+0·2	+0·2	−0·1	+0·1	+0·3	+0·2	+0·1	+0·2	+0·1
14	+0·1	+0·1	−0·1	−0·1	−0·2	−0·6	−0·1	−0·1	0·0	0·0	+0·1	+0·2	+0·1	0·0	−0·3	0·0
15	+0·2	+0·1	−0·1	−0·2	−0·4	−0·5	−0·3	−0·1	0·0	+0·1	+0·2	+0·1	+0·2	−0·1	−0·3	−0·1
16	+0·2	+0·1	−0·1	−0·3	−0·3	−0·4	−0·2	−0·2	0·0	+0·1	+0·1	+0·2	+0·1	−0·1	−0·3	−0·1
17	+0·1	0·0	−0·1	−0·1	−0·1	−0·2	−0·1	−0·1	0·0	+0·2	+0·2	+0·1	+0·1	0·0	−0·1	0·0
18	+0·1	−0·1	0·0	+0·1	0·0	−0·1	0·0	+0·1	+0·1	+0·3	+0·2	+0·1	+0·1	+0·1	0·0	+0·1
19	+0·1	−0·1	0·0	+0·1	+0·1	+0·1	+0·1	+0·2	+0·1	+0·3	+0·3	+0·1	+0·1	+0·1	+0·1	+0·1
20	0·0	−0·1	+0·1	+0·2	+0·3	+0·2	+0·2	+0·3	+0·1	+0·3	+0·3	+0·1	+0·1	+0·2	+0·2	+0·2
21	−0·1	−0·1	+0·1	+0·2	+0·5	+0·2	+0·3	+0·4	+0·2	+0·3	+0·1	−0·1	0·0	+0·2	+0·3	+0·2
22	−0·4	−0·2	0·0	+0·3	+0·4	+0·2	+0·5	+0·5	+0·3	+0·2	0·0	−0·1	−0·2	+0·2	+0·4	+0·1
23	−0·3	−0·3	−0·1	+0·2	+0·4	+0·4	+0·5	+0·5	+0·3	0·0	−0·2	−0·3	−0·3	+0·1	+0·5	+0·1
Non-cyclic change (24h—0h.)	−0·15	−0·15	−0·27	−0·01	−0·06	+0·07	+0·09	−0·04	+0·07	−0·02	+0·04	−0·17				

DIURNAL VARIATION OF H, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−6	−4	−8	−7	−6	−7	−9	−4	−4	−5	−6	−5	−5	−6	−7	−6
1	−3	−3	−8	−9	−7	−5	−9	−5	−5	−4	−5	−3	−4	−6	−7	−6
2	+1	−2	−6	−9	−4	−1	−7	−6	−7	**−1**	+2	−1	0	−6	−4	−3
3	+6	+5	−2	−7	+4	+8	+1	+1	−5	+4	+10	+3	+6	−2	+3	+2
4	+10	+11	+7	+7	+14	+16	+14	+10	+7	+11	+18	+8	+12	+8	+13	+11
5	+15	+17	+18	+19	+22	**+21**	+25	+17	+19	+21	+24	+14	+18	+19	+22	+19
6	**+21**	+22	+26	**+27**	**+25**	**+24**	**+29**	+18	**+23**	**+28**	**+28**	+18	**+22**	**+26**	**+24**	**+24**
7	+21	**+23**	**+28**	+27	+22	+22	+27	**+19**	+20	+23	+22	**+19**	+21	+24	+22	+23
8	+14	+19	+23	+23	+12	+18	+24	+16	+15	+12	+12	+15	+15	+18	+18	+17
9	+6	+12	+15	+15	+3	+11	**+18**	+9	+10	+2	+4	+10	+8	+10	+11	+9
10	0	+5	+6	+7	−1	+3	+9	+4	+4	−5	+1	+3	+2	+3	+4	+3
11	−2	0	+1	+3	−4	−3	−1	−1	−2	−7	−3	−1	+2	−1	−2	−2
12	−2	−2	−2	−3	−5	−8	−8	−5	−5	−9	−5	−4	−3	−5	−6	−5
13	−5	−4	−4	−7	−8	−10	−10	−6	−5	−8	−6	−5	−5	−6	−8	−7
14	−8	−6	−6	−8	−7	**−11**	−9	−6	−8	−8	−8	−6	−7	−7	−9	−8
15	−9	−8	−8	−9	−8	−10	−10	−7	−9	−8	−11	−6	−8	−8	−9	−9
16	−9	−8	−10	−9	−9	−10	−11	−6	**−11**	−9	−13	−9	−10	**−10**	−9	−10
17	−8	−10	**−11**	−9	−7	−9	**−12**	−6	−9	−8	−13	−9	**−10**	−10	−8	−9
18	−8	**−12**	−11	−9	−5	−8	−12	−7	−7	−8	−12	−7	−10	−9	−8	−9
19	−7	−11	−11	−8	−6	−9	−11	−7	−4	−6	−11	−8	−10	−7	−8	−8
20	−7	−11	−10	−9	−6	−9	−10	−7	−3	−6	−9	−9	−9	−7	−8	−8
21	−6	−8	−10	−9	−7	−7	−10	−7	−4	−3	−8	−6	−7	−7	−8	−7
22	−5	−7	−10	**−10**	−7	−7	−10	−7	−4	−3	−5	−6	−6	−7	−8	−7
23	−5	−7	−8	−8	−6	−8	−9	−7	−5	−3	−6	−5	−6	−6	−7	−6
Non-cyclic change (24h—0h.)	+4·3	+6·9	+6·4	+1·2	+3·8	+4·3	+5·2	+0·8	+0·9	+5·0	−1·5	+8·0				

DIURNAL VARIATION OF Y, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−6	−4	−3	+3	+5	+6	+7	+7	+3	0	−4	−5	−5	+1	+6	+1
1	−7	−5	−3	+7	+13	+15	+14	+15	+8	0	−5	−6	−6	+3	+15	+4
2	−9	−4	−2	+18	+23	**+25**	+25	+25	+21	+5	−7	−7	−7	+10	+24	+9
3	−4	+1	+5	**+23**	**+24**	+24	**+27**	**+27**	**+28**	**+8**	−3	−5	−3	**+16**	**+25**	**+13**
4	+5	+7	**+10**	+17	+17	+14	+18	+19	+22	+3	0	+3	+4	+13	+17	+11
5	**+8**	**+7**	+8	+7	−1	+1	+5	+2	+2	−6	0	+6	**+5**	+3	+2	+3
6	+6	−1	+3	−6	−15	−12	−10	−16	−15	**−14**	−6	−1	−1	−8	−13	−7
7	+2	−6	−5	−20	−26	−19	−25	−25	−25	−13	−5	−7	−4	−16	−24	−15
8	+2	−6	**−10**	−24	−28	**−20**	−31	**−27**	**−27**	−10	0	−3	−2	**−18**	**−27**	**−15**
9	0	0	−7	−21	−20	−15	−25	−23	−23	−3	+3	+2	+1	−13	−21	−11
10	−1	+3	−1	−12	−9	−9	−17	−16	−12	+3	+3	+3	+2	−5	−13	−5
11	+1	+6	+3	−4	0	−1	−5	−6	−1	+6	+3	+6	+4	+1	−3	+1
12	+3	+6	+2	+1	+4	+1	+3	0	+4	+3	**+4**	+5	+4	+3	+2	+3
13	+1	+2	0	+2	+3	−2	+4	+2	+3	−1	+1	+3	+2	+1	+2	+1
14	+2	+2	−1	−1	−3	−6	−1	−1	0	0	+1	+2	+2	0	−3	0
15	+3	+1	−1	−2	−4	−6	−3	−1	0	+1	+2	+2	+2	−1	−3	−1
16	+2	+1	−1	−3	−3	−4	−3	−2	0	+1	+1	+2	+2	−1	−3	−1
17	+1	0	0	0	−1	−2	−1	−1	0	+2	+2	+1	+1	0	−1	0
18	+1	−1	0	+1	0	−1	+1	+1	+1	+3	+3	+1	+1	+1	0	+1
19	+1	−1	0	+1	+2	+2	+1	+2	+1	+3	+3	+1	+1	+2	+2	+1
20	0	−1	+1	+2	+4	+2	+2	+3	+2	+3	+3	+1	+1	+2	+3	+2
21	−1	−1	+1	+3	+5	+3	+4	+4	+3	+3	+1	−1	0	+2	+4	+2
22	−4	−2	0	+3	+5	+3	+5	+5	+3	+2	0	−1	−2	+2	+4	+1
23	−4	−4	−1	+2	+5	+4	+5	+6	+3	0	−2	−4	−3	+1	+5	+1

DIURNAL VARIATION OF Z, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−1	0	+2	+5	+9	+7	+5	+5	+8	−1	+2	+1	+1	+3	+7	+4
1	−1	+1	+2	+8	**+14**	+9	+10	+11	+13	+1	+1	+1	0	+6	**+11**	+6
2	−2	+1	+5	**+11**	+12	**+11**	+8	**+11**	**+16**	+3	+1	+1	0	**+9**	+11	**+6**
3	+4	+2	**+8**	+2	+3	0	+1	+4	+6	−1	**+3**	+5	+4	+4	+2	+3
4	**+6**	+1	+1	−11	−13	−14	−12	−11	−12	−8	+1	**+10**	**+4**	−7	−13	−5
5	−1	−7	−2	−18	−24	**−21**	−19	−21	−24	**−13**	−4	+3	−2	−14	−21	−13
6	**−5**	**−14**	−10	−22	**−24**	−19	**−23**	**−23**	**−32**	−12	**−7**	−7	**−8**	**−19**	**−22**	**−17**
7	−3	−9	−13	−21	−19	−17	−20	−18	−25	−7	−3	**−9**	−6	−16	−18	−14
8	−1	−2	−9	−13	−12	−10	−9	−10	−17	0	−1	−1	−1	−10	−10	−7
9	−3	+3	−2	−3	−2	−2	−1	−5	−4	+4	0	+1	0	−1	−3	−1
10	−2	+4	+3	+4	+5	+4	+7	+2	+4	**+7**	0	+2	+1	+5	+4	+3
11	+1	**+4**	+2	+8	+9	+5	**+12**	+7	+8	+1	+1	+4	+3	+5	+8	+5
12	+2	**+2**	−1	+3	+7	+3	+11	+4	+5	−3	0	+2	+3	+1	+6	+3
13	+1	0	−1	+6	0	+1	+5	+3	+2	−1	0	+2	0	+2	+2	+1
14	+2	0	−1	+5	+5	+1	+1	+1	+2	+1	+1	+2	+1	+2	**+2**	+2
15	+2	+1	0	+2	0	**+3**	+2	+1	+3	+2	+1	+1	**+1**	+2	+1	+2
16	+1	+1	+1	+4	+1	+4	+3	+2	+4	+2	+1	0	+1	+3	+3	+2
17	+1	+1	+1	+5	+3	+5	+4	+4	+5	+3	+1	0	+1	+4	+4	+3
18	+1	+2	+2	+6	+6	+5	+3	+5	+6	+4	+2	0	+1	+5	+5	+4
19	+1	+2	+3	+7	+5	+5	+3	+5	+7	+4	+1	−1	+1	+5	+5	+3
20	0	+2	+2	+6	+5	+5	+3	+7	+7	+3	+1	−2	0	+4	+4	+3
21	−1	+2	+2	+5	+4	+5	+3	+5	+7	+3	0	−3	0	+5	+4	+3
22	−1	+2	+1	+5	+4	+5	+2	+5	**+6**	+3	0	−4	−1	+4	+4	+2
23	0	+2	+1	+5	+3	+6	+2	+5	+5	+3	−1	−5	−1	+4	+4	+2
Non-cyclic change (24h—0h.)	−3·5	−0·4	−1·0	−6·3	−1·3	−6·9	+9·7	−1·1	−2·4	−2·5	−2·8	+11·3				

DIURNAL VARIATION OF I, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	+0·2	+0·2	+0·5	+0·6	+0·9	+0·7	+0·6	+0·5	+0·7	+0·1	+0·4	+0·3	+0·3	+0·5	+0·7	+0·5
1	0·0	+0·1	+0·4	+0·9	**+1·2**	**+0·9**	+0·0	**+1·0**	+1·2	+0·2	+0·3	+0·2	+0·1	+0·7	**+1·0**	**+0·6**
2	−0·1	+0·1	+0·5	**+1·1**	+1·0	+0·8	+0·9	+1·0	**+1·5**	+0·3	−0·1	+0·1	0·0	**+0·9**	+0·9	+0·6
3	+0·1	0·0	+0·7	+0·3	+0·1	−0·3	+0·1	+0·3	+0·7	−0·2	−0·1	+0·3	+0·1	+0·4	+0·1	+0·2
4	0·0	−0·4	−0·2	−1·0	−1·5	−1·7	−1·4	−1·2	−1·2	−1·0	−0·7	**+0·4**	−0·2	−0·9	−1·5	−0·8
5	−0·6	−1·1	−0·8	−2·0	−2·6	−2·4	−2·3	−2·1	−2·5	−1·8	−1·2	−0·2	−0·8	−1·8	−2·3	−1·6
6	**−1·2**	**−1·9**	−1·6	**−2·7**	**−2·7**	**−2·3**	**−2·8**	**−2·4**	**−3·2**	**−1·9**	**−1·5**	−1·2	**−1·5**	**−2·3**	**−2·5**	**−2·1**
7	−0·9	−1·5	**−1·9**	−2·6	−2·2	−2·1	−2·5	−2·0	−2·6	−1·3	−1·0	**−1·4**	−1·2	−2·1	−2·2	−1·8
8	−0·6	−0·8	−1·4	−1·8	−1·3	−1·3	−1·6	−1·3	−1·8	−0·4	−0·4	−0·6	−0·6	−1·3	−1·4	−1·1
9	−0·4	−0·2	−0·7	−0·7	−0·3	−0·6	−0·8	−0·6	−0·6	+0·2	−0·1	−0·3	−0·3	−0·5	−0·6	−0·4
10	−0·1	+0·1	0·0	+0·1	+0·4	+0·2	+0·2	−0·1	+0·2	**+0·7**	0·0	0·0	0·0	+0·3	+0·2	+0·1
11	+0·2	+0·3	0·0	+0·5	+0·7	+0·5	+0·9	+0·5	+0·7	+0·4	+0·1	+0·3	+0·3	+0·4	+0·7	+0·4
12	+0·3	+0·2	0·0	+0·3	+0·7	+0·5	**+1·1**	+0·5	+0·6	+0·1	+0·2	+0·3	+0·3	+0·3	+0·7	+0·4
13	+0·3	+0·2	0·0	+0·3	+0·3	+0·4	+0·7	+0·4	+0·4	+0·3	+0·2	+0·3	+0·3	+0·4	+0·5	+0·4
14	**+0·4**	+0·2	+0·2	+0·7	+0·6	+0·5	+0·4	+0·3	+0·4	+0·4	+0·3	+0·3	+0·3	+0·4	+0·5	+0·4
15	+0·4	+0·4	+0·3	+0·5	**+0·3**	+0·6	+0·5	+0·3	+0·5	+0·5	+0·4	+0·3	+0·4	+0·5	+0·4	+0·4
16	**+0·4**	+0·4	+0·5	+0·6	+0·4	+0·7	+0·6	+0·4	**+0·7**	+0·5	**+0·6**	+0·3	+0·4	+0·6	+0·5	+0·5
17	+0·4	+0·5	+0·5	+0·7	+0·5	+0·7	+0·7	+0·5	**+0·7**	+0·5	+0·6	+0·3	**+0·5**	+0·6	+0·6	+0·5
18	+0·3	**+0·6**	+0·6	+0·8	+0·6	+0·7	+0·7	+0·7	+0·8	+0·6	+0·5	+0·3	+0·4	+0·7	+0·7	+0·6
19	+0·3	+0·6	+0·6	+0·8	+0·6	+0·7	+0·6	+0·7	+0·7	+0·5	+0·5	+0·2	+0·4	+0·7	+0·7	+0·6
20	+0·2	+0·6	+0·5	+0·7	+0·6	+0·7	+0·5	+0·9	+0·6	+0·4	+0·4	+0·1	+0·3	+0·5	+0·7	+0·5
21	+0·2	+0·5	+0·5	+0·7	+0·5	+0·7	+0·6	+0·7	+0·6	+0·4	+0·3	−0·1	+0·2	+0·5	+0·6	+0·5
22	+0·2	+0·5	+0·5	+0·8	+0·5	+0·7	+0·6	+0·6	**+0·6**	+0·3	+0·2	−0·1	+0·2	+0·5	+0·6	+0·5
23	+0·2	+0·3	+0·4	+0·7	+0·5	+0·7	+0·4	+0·6	+0·6	+0·3	+0·2	−0·2	+0·1	+0·5	+0·5	+0·4

DIURNAL VARIATION OF F, 1933.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−5	−4	−6	−4	−2	−3	−6	−1	0	−5	−4	−5	−5	−4	−3	−4
1	−3	−3	−6	−4	0	−1	−5	0	+1	−3	−4	−3	−3	−3	−1	−3
2	0	−1	−3	−3	+2	+4	−3	0	0	0	+2	−1	0	−2	+1	0
3	+7	+5	+2	−5	+5	+7	+1	+3	−2	+3	+11	+5	+7	−1	+4	+3
4	+11	+10	+7	+2	+7	+8	+7	+4	+1	+6	+17	+11	+12	+4	+7	+8
5	+13	+13	+15	+10	+10	+10	+15	+7	+7	+14	+20	**+14**	+15	+11	+10	+12
6	+17	+13	+20	+15	**+13**	**+13**	+17	+7	**+7**	+20	+22	**+13**	**+16**	**+15**	**+12**	**+15**
7	**+17**	**+17**	**+20**	**+16**	+11	+12	+16	+9	+7	+18	+19	+13	**+17**	+15	+12	+15
8	+12	+16	+17	+15	+6	+12	**+18**	**+11**	+6	+11	+11	+13	+13	+12	+11	+12
9	+4	+12	+12	+12	+2	+9	+16	+6	+7	+3	+3	+10	+7	+9	+8	+8
10	−1	+6	+7	+8	+1	+4	+11	+5	+5	−2	+1	+3	+2	+5	+5	+4
11	−1	+2	+2	+7	0	−1	+4	+2	+2	−6	−3	+1	0	+1	+1	+1
12	−1	−1	−2	−1	−2	−6	−2	−3	−2	**−9**	−5	−2	−2	−4	−3	**−3**
13	−4	−4	−4	−4	**−8**	−9	−7	−4	−3	−8	−5	−3	−4	−5	−7	−5
14	−7	−5	−5	−5	−5	**−10**	−8	−5	−6	−7	−7	−4	−6	−6	−7	−6
15	−7	−7	−7	**−8**	−8	−8	−8	**−5**	−7	−6	−9	−5	−7	−7	−7	−7
16	**−8**	−7	−8	−6	−7	−7	−9	−5	**−8**	−7	**−11**	−8	**−9**	**−7**	−7	**−8**
17	−7	−9	**−9**	−6	−5	−6	**−9**	−4	−7	−6	−11	−8	−9	−7	−6	−7
18	−7	**−10**	−9	−5	−2	−5	−9	−4	−4	−6	−10	−7	−8	−6	−5	**−7**
19	−6	−9	−9	−4	−3	−6	−8	−4	−1	−4	−9	−8	−8	−5	−5	−6
20	**−6**	−9	−8	−5	**−3**	−6	−7	−3	**+1**	−4	−8	**−9**	−8	−4	−5	−6
21	−6	−7	−8	−6	−4	−5	−8	−4	−1	−2	−7	−7	−7	−4	−5	−5
22	−5	−6	−8	−7	−5	−5	−8	−4	−1	−2	−5	−7	−6	−5	−5	−5
23	−5	−5	−7	−5	−4	−5	−7	−4	−2	−1	−5	−7	−6	−4	−5	−5

DECLINATION (WESTERLY), 1933.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JANUARY. 0° PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	14·3	14·4	14·5	14·4	14·4	14·5	15·3	15·7	15·3	14·9	14·4	13·6	13·3	13·7	14·1
2	14·6	14·5	14·6	14·9	14·4	14·4	14·3	14·4	14·3	14·2	14·3	13·3	13·0	13·3	13·4
3	14·2	14·5	14·5	14·4	13·7	13·2	13·5	14·5	14·6	14·4	13·9	13·7	13·6	13·6	13·9
4†	14·5	14·5	14·5	14·4	13·8	13·9	14·3	14·5	13·9	14·3	14·4	14·2	14·0	13·9	13·7
5†	14·1	14·4	14·5	14·2	13·5	13·2	13·4	14·0	14·5	14·9	15·3	14·5	13·7	13·7	13·8
6	14·5	14·5	14·8	14·5	13·6	13·1	13·5	14·1	13·6	13·3	13·4	13·5	13·4	12·7	12·4
7	15·0	14·8	15·3	15·0	14·1	14·0	14·5	14·8	14·3	13·8	13·8	14·2	14·1	14·0	13·7
8	15·0	15·3	15 4	15·3	14·0	13·5	13·3	13·6	13·3	13·4	13·8	13·9	13 5	13·5	13·5
9	14·6	14·8	15·4	15·1	14 1	13·0	12·8	12·9	12·5	13·5	14·5	14 0	13·8	13 9	13.8
10†	14 6	14·7	14·9	14·4	13·6	13·0	13·2	13·4	13·0	13·3	13·6	13·7	14 1	14·3	14·0
11†	14 4	14·6	14·9	14·5	13·7	13·5	13·4	13·7	13·8	13·6	13·8	13·8	13 8	14·1	14·1
12	15·2	15·5	15 4	14·6	13·6	13·0	13 1	13·0	12·6	12·8	13·4	13·6	14 1	14·3	14·3
13	14·7	15·1	15·5	15·0	14·1	13·8	13·7	13·9	14·0	13·3	14·6	14 1	13·8	14·1	14·1
14	14·9	15·1	15 0	14 5	13·4	13·6	14·8	15·2	14.8	14·8	14·8	14·6	14·2	14·3	14·0
15	14 3	15 2	15 4	14.7	13·3	12.9	13·6	13·6	12·5	12·6	12·9	12·9	13·5	13·7	13·6
16	14·7	14·7	14·7	13·9	13 6	14·5	14·6	13 9	13·6	13·3	13·6	13 1	12·6	13·3	13·8
17	14 3	14 5	14 2	13·8	12·9	13·1	13·6	13·7	13·4	13·1	13·5	13 6	13 6	13·7	13·9
18	14·5	14·7	14.7	13·9	12·7	12·8	14·1	14·1	16·6	15·8	14·6	13·6	13·3	13·9	14·1
19	14 6	14·7	14·9	14·4	13·5	13·4	14·0	14·8	14·9	14·6	14·5	13·8	13·6	13·6	13·6
20	15·2	15 4	15·5	14·9	14·7	14·4	13·8	14·0	14·0	14·0	13·9	13·6	13 6	13·6	13·6
21†	15 1	15·1	15·2	14·3	13·1	12·6	12 9	13·6	14·1	14·1	13·7	13·6	13·6	14·0	14·0
22	15 2	15·2	15·1	14·8	13·8	14·1	15·6	16·0	15·9	15·5	14·9	13·9	13·7	13·8	13·9
23	14 0	14·6	14 3	14·7	12·4	11·7	12·3	13·2	13·3	13·9	13·7	13·7	13.7	14·2	13·9
24	14 7	14·9	15·4	14·9	13·2	11·9	12·4	13·6	13·5	13·5	13·8	14·1	13·4	13·5	13·9
25	14 3	14·4	14·5	13·9	13·0	13·0	14·6	15·8	15.3	14·3	14·3	14·1	14·2	14·4	14·0
26	14 3	14·7	15·3	15·4	14·0	13·6	13·7	14·4	14·4	13·6	13·4	13·9	14 1	14·1	13·9
27	14 3	15·1	15·3	15·1	14·3	13·6	13·9	14·3	13·6	13·3	13·9	14·7	14·9	14·5	14·5
28	14 3	14·7	15·3	15·6	14·6	14·3	14·7	15·1	14·7	13·6	12.8	13·6	13·8	13.8	14·1
29	14·1	14·3	15·0	15·1	14·5	14·2	14.4	14·2	13·9	13·7	13·7	14·0	14·7	14·5	14·5
30	14·7	14·8	15·1	14·6	13·8	13·5	14·7	15·3	14·8	14·1	13·5	13·2	13·5	14·1	14·1
31	13·6	13·7	14·5	14·0	14·1	14·7	15·1	15·0	14·6	13·9	13·7	13·6	13·6	14·0	14·0
Mean . .	14·5	14·7	14·9	14·6	13·7	13·5	13·9	14·3	14·1	14·0	13·9	13·8	13·7	13·9	13·9
Mean† . .	14·6	14·7	14.9	14·4	13·5	13·3	13·5	13·9	13·9	14·1	14·2	14·0	13·8	14·0	13·9

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1	14·4	14·5	14·7	14·1	13·0	12·6	13·3	14 4	14·7	14·6	14·1	13·7	13·6	13·7	14·0
2	14·4	14·5	14·4	13·7	12·6	12·6	13·7	14·0	13·9	13·5	13·7	13·6	13·6	13·6	13·7
3	14·3	14·3	14·1	13·3	11·9	12·0	13·5	14·7	14·6	14·0	13·3	13·1	13·5	13·6	13·6
4	14·2	14·3	14·7	14·7	14·1	13·7	13·7	13·5	12·6	11·8	11·8	12·7	13·5	13·7	13·7
5	14·4	14·5	14·8	14·8	14·0	13·7	13·8	13·5	12·7	12·7	13·7	14·7	14·3	13·8	13·7
6†	14·5	14·5	14·5	14·1	13·9	13·7	13·7	13·6	13·5	13.1	13·4	13·0	12·9	13·3	13·5
7	14·6	14·8	14·8	14·6	13·3	13·1	13·1	13·2	13·3	13·4	13·6	13·7	14·2	14·1	13·7
8	14·0	14·2	14·3	13·4	12·8	12·7	13·3	13·7	13·0	13·3	13·7	13·8	14·0	14·1	13·9
9	14·7	14·7	14·7	14·0	13·4	13·5	13·9	14·3	14·0	13·7	13·7	14·2	14·6	14·6	14·1
10	14·3	14·1	13·7	13·5	13·2	13·5	13·8	14·2	13·9	13·7	13·7	13·7	13·7	13·9	13·9
11†	13·9	14·2	14·1	13·8	13·0	13·0	14·2	14·7	14·6	13·8	13·3	13·3	13·3	13.7	13·7
12	14.1	14·2	14·3	14·3	14·5	14·7	15·3	15·5	14·8	13·6	12·4	12·0	12·7	13·7	13·9
13†	13·9	13·8	13·5	13·1	13.0	13·4	13·8	14·5	14·4	13·8	13·4	12·7	12·8	13·5	13·6
14	13·9	13·9	13·7	13·7	14·1	14·7	14·9	14·9	14·7	14.0	13·4	12·9	13·0	13·3	13·8
15	14·4	14·3	14·5	14·3	14·1	14·3	14·4	14·4	14·0	13·0	12·9	12·9	13·0	13·7	13·9
16†	14·1	14·2	14·5	14·1	13·6	13·5	14·1	14·6	14·6	13·9	13·6	13·1	13·5	13·6	13·7
17†	14·0	13·9	13·8	12·9	12·1	12·0	13·1	14·0	14·2	14·1	14·0	13·9	13·8	13·7	13·7
18	14·5	14·7	14·2	13·7	13·4	13·7	14·5	15·1	15·2	14 9	14·4	13·9	13·8	14·0	13·9
19	14·1	14.0	13·7	13·7	13·6	14·0	14·7	15.1	15·3	15·4	14·6	13·9	14·0	13·1	13·0
20	15·2	14·2	14·2	14·2	14·0	13·8	13·7	14·0	13·9	13·8	13·3	13·3	13·7	13·4	13·8
21	14·3	14·1	14·0	13·6	14·0	13·4	13·2	13·7	13·9	13·4	12·9	12·9	13·6	13·4	13·5
22	13·8	14·8	14·3	14·3	13·5	12·9	13·2	13·4	13·4	13·2	12·7	12·5	12·7	13·6	13·5
23	13·7	13.7	13·7	13·7	13·3	13·7	14·3	14·3	14·6	14·9	13·8	13·3	13·3	13·7	13·1
24	13·3	13·4	13·6	13·7	14·3	14.9	15·4	15 1	14·9	14·4	13·0	12·7	12·1	13.5	13·6
25	13·2	13·6	13·7	13·6	13·6	13·9	14·4	14·1	13·7	13·2	12·5	12·2	13·4	13·7	13·7
26	13·4	13·3	13·1	14·1	14·8	15·1	14·9	14·8	14·8	14.4	13·6	12·7	12·3	12·9	13·4
27	13·4	13·5	13·3	12·8	13·4	14·1	14·9	15·3	15·2	14.6	13·7	12·9	12·9	13·7	13·7
28	13·7	13·6	13·6	12·7	12·1	12·7	13·2	13·9	14·8	14·7	14·1	13·4	13·3	13.6	13·8
Mean . .	14·1	14·1	14·1	13·8	13·5	14·0	14·3	14·2	13·8	13·4	13·2	13·4	13·7	13·7	13·6
Mean† . .	14·2	14·2	14·4	13·7	13·1	13·1	13·9	14·3	14·3	13·7	13·5	13·2	13·2	13·6	13·6

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JANUARY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
13·9	14·4	14·4	14·4	13·9	13·5	13·4	13·6	14·4	14·3	11 40	13·1	6 50	16·1	1
13·6	13·7	13·8	13·7	13·6	13·7	14·1	14·0	14·2	14.0	11 50	12·9	2 40	15·3	2
13·9	14·0	14·3	14·3	14·3	14·3	14·3	14·4	14·4	14·1	4 52	13·0	7 38	15·0	3
13 5	13·5	13·5	13·6	13.6	13·7	13·9	14·0	14·0	14·0	14 2	13·4	2 2	14·7	4†
13 7	13·8	14·0	14·0	14·1	14·2	14·3	14·4	14·5	14·1	5 0	13·2	9 50	15·4	5†
13·2	13·4	13·5	13·5	13·7	14·1	14·1	14·3	14·5	13·7	13 52	12·2	2 10	14·9	6
13·8	14·0	13·6	13·5	13·7	14·1	14·5	14·6	14·8	14·3	17 40	13·2	2 30	15·5	7
13·6	13·8	14·0	13·9	13·8	13·9	14·2	14·5	14·6	14·0	5 30	13·1	2 30	15·6	8
14·0	13·9	13·8	14·0	14·0	14·1	14·3	14·4	14·6	14·0	7 50	12·4	2 10	15.4	9
13·9	13·9	14·1	14·0	13·8	13·8	13·8	14·7	14·3	13·9	8 12	12·8	2 0	15·1	10†
14·2	14·3	14·4	14·3	14·3	14·3	14·4	14·6	14·9	14·2	6 0	13·2	2 0	15·1	11†
14·3	14·3	14·3	14·3	14·3	14·3	14·5	14·5	14·5	14·1	8 16	12·4	1 30	15·6	12
14·1	14·3	14.2	14·1	14·0	13·9	14·0	14·4	14·7	14·3	6 0	13·7	2 10	15·6	13
14·1	14·1	14.1	14·0	13·8	13·6	13·6	13·6	13·8	14·3	4 20	13·1	0 56	15·2	14
13·6	13·6	13.7	14·0	14·1	14·1	14·4	14·9	14·5	13·8	8 30	11·7	2 0	15·5	15
13·7	13·7	14.1	14·1	14·1	14·1	14·1	14·2	14·3	13·9	11 3	12·6	1 0	14·9	16
14·1	14·3	14·4	14·4	14·4	14·3	14·3	14·2	14·4	13·9	4 10	12·8	16 3	14·5	17
14·1	14·1	14·1	14·1	14·2	14·3	14.3	14·4	14·6	14·2	4 24	12·3	7 30	**16 7**	18
13·6	13·8	13·4	13·8	13·8	13·9	14·1	14·4	14·9	14·1	4 50	13·1	23 24	15·4	19
13·7	13·8	13·8	13·8	13·9	13·9	14·1	14·3	14·7	14·2	6 30	13·5	1 30	15·5	20
13·9	14·1	14·0	14·1	14·3	14·6	14·7	14·7	14·7	14·1	5 0	12·5	1 50	15·2	21†
13·9	13·4	13.3	13·0	13·3	13·3	13.6	13·2	13·5	14·2	18 10	12·6	6 50	16·2	22
13·7	13·9	13·7	13·7	13·5	13·1	13·3	13·5	14·5	**13·6**	5 0	11·6	23 16	15.0	23
13 8	13·7	13·7	13·7	13·5	13·4	13·4	13·7	13·7	13·7	5 0	**11·5**	1 48	15·6	24
13·7	13·7	13·7	13·5	13·7	13·7	13·8	13·7	13·8	14·1	4 24	12·5	7 0	16 0	25
13 6	13·7	13·7	13·7	13·7	13·6	13·7	13·7	13·8	14·0	9 24	13·3	2 30	15·9	26
13·9	14·1	13·7	13·5	13·3	13·0	13·0	13·6	13·7	14·0	19 30	12·7	1 12	15·6	27
14 3	14·2	13·7	13·8	13·7	13·6	13·5	13·2	12·9	14·1	10 16	12·5	2 50	15·7	28
14·4	14·2	14·4	14·2	14·3	14·1	14·3	14.4	14·7	**14·3**	10 10	13·5	2 44	15·3	29
14·1	13·7	14·2	14·1	14·0	14·0	13·8	13·7	13·7	14·1	10 30	13·2	6 36	15·5	30
14·1	14·2	14·0	14·2	14·2	14·2	14·2	14·4	14·2	14·2	11 0	13·5	6 50	15·3	31
13·9	13·9	13·9	13·9	13·9	13·9	14·0	14·1	14·3	14·1					Mean.
13·8	13·9	14·0	14·0	14·0	14·1	14·1	14·4	14·4	14·1					Mean.†

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14·1	14·2	14·1	14·2	14·2	14·1	14·2	14·3	14·3	14·1	4 20	12·6	2 0	14·8	1
13·6	12·9	12·9	13·3	13·7	13·7	13·7	14·0	14·2	13·6	4 10	12·2	0 58	14·5	2
13·6	13·6	13·8	13.7	13·7	13·7	13·8	13·8	14·1	13.7	4 30	11·8	7 0	14 8	3
13·7	13·7	13·7	13·7	13·7	13·7	13.7	13·7	13·9	13·6	9 20	**11·6**	1 50	14·7	4
13·7	13·7	13·7	13·7	13·7	13·7	13·7	13·8	14·2	13·9	8 20	12·5	2 20	15·0	5
13·7	13·7	13·7	13·7	13·7	13·7	13·8	14·0	14·3	13·7	11 30	12·7	0 0	14·5	6†
13·6	13·7	13·6	13·6	13·7	13·7	13·8	13·9	14·1	13·8	4 24	13·1	2 0	14·8	7
13·9	13·9	13·8	13·8	13·8	13·9	14·2	14·3	14·4	13·8	4 30	12·7	23 30	14·7	8
14·0	13·7	13·7	13·7	13·7	13·7	13·7	14·0	14·0	14·0	4 10	13·4	1 30	14·9	9
13·7	13·7	13·7	1..7	13·9	13·7	13·7	13·9	13·9	13·8	3 50	13·2	0 0	14·2	10
13·7	13·7	13 7	13·7	1 .7	13·7	13·8	13·9	14·0	13·8	5 30	12·7	7 30	14·7	11†
13·9	13·9	14·0	14·0	13·9	13·9	4·0	13·9	13·9	14·0	11 6	11·9	6 3.	**15·8**	12
13·7	13·7	14·0	14·2	14·2	14·2	14·2	14·1	14·1	13·7	11 22	12·5	7 30	14·7	13†
14 2	14·2	14·4	14·3	13·4	13·5	13·7	13·9	14·0	13·9	11 ·2	12·8	6 20	15·1	14
13·7	13·4	13·1	13·2	13·7	13·7	13·7	14·0	14·1	13·8	10 24	12·5	5 50	14·7	15
13·7	13·7	13·8	13·9	14.0	13·9	14·0	14·0	14·0	13·9	10 58	13·	7 30	14·7	16†
13·7	13·8	14·0	13·9	13·8	13·9	14·0	14·2	14·4	13·7	4 30	11·8	23 30	14·5	17†
13·8	13·9	13·9	13·9	13·8	13·7	13·8	13·9	14·0	**14·1**	4 10	13·4	7 30	15·5	18
12·6	13·1	13·2	13 2	13·7	12·9	13·5	13·7	14·0	13·9	14 24	12 2	8 40	15·6	19
13·7	13·7	13·7	13·5	13·2	13·5	13·7	13·7	13·9	13·8	9 40	12·9	0 0	15·5	20
12·8	12·9	13·0	13·3	13·7	13·3	13·4	13·9	14·2	13·5	10 10	12·6	22 30	14·8	21
13·3	13·6	13·7	13·7	13·5	13·2	13·5	13·5	13·7	**13·5**	11 30	12·2	0 30	15·0	22
13·0	13·3	13·2	13·4	13·2	13·7	13·2	13·1	12·7	13.6	22 5.	12·6	8 30	15·3	23
13·5	13·7	13·7	13·2	12·8	13·0	13·3	13·6	13·3	13.7	11 54	11·8	5 30	15·4	24
13·7	13·7	13·7	13·7	13·7	13·4	13·6	13·4	13·5	13·5	10 40	11·8	5 56	14·6	25
13·6	13·7	13 7	13·7	13·7	13·6	13·7	13·7	13·2	13·8	11 4.	12·0	5 0	15·4	26
13·7	13·7	13·7	13·5	13·6	13·6	13·7	13·7	13·7	3·8	10 58	12·7	7 10	15·4	27
13·9	13·9	14·0	13·9	13·9	13·8	13·8	13·7	13·7	13·7	3 30	11·8	8 20	15 0	28
13·7	13·7	13.7	13·7	13·7	13·7	13·7	13·9	13·9	13·8					Mean.
13·7	13·7	13·8	13·8	13·9	13·8	13·9	14·0	14·1	13·8					Mean†

* The daily mean value of declination derived from 24 hourly values has been corrected for progressive change by 1/48th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	13·7	13·9	13·9	13·2	12·5	12·0	12·0	12·8	13·9	14·7	14·5	14·0	13·9	13.8	14·1
2	14.0	14·1	13·9	13·4	12·8	12·9	13·4	13·7	13·7	13·9	13·7	13·7	13·8	13·9	14·1
3	13·7	14·0	14·0	14·1	13·7	13·7	14·0	14·0	14·3	14·8	15·1	14·9	14·8	14·7	14·5
4	13·9	13.9	14·0	13·7	13·7	13·5	13·7	14·0	14·7	15·0	14·3	13·7	13·7	13·7	13·7
5†	13·7	13·7	13·7	13·0	13·0	13·7	14·4	15·0	15·5	14·8	14·2	13.7	13·7	13·7	13·7
6†	14·1	14·1	14·0	13·5	12·6	12·5	13·0	14·5	15·1	14·8	14·1	13·7	13·7	13·7	13·7
7†	14·5	14·5	14·4	13·6	13·0	13·3	13·7	14·4	14·8	14·7	14·2	13·4	13·7	14·3	14·4
8	14·5	14·5	14.3	13·3	12·6	12·7	13·0	13·6	14·1	14·3	14·0	14·1	14·3	14·1	14·1
9†	14.0	14·1	14·0	13·4	12·5	12·3	12·3	12·6	13·4	13·7	13·7	13.7	13·7	13·7	14·0
10	14·0	14·2	14·1	13·0	12·5	12·2	12·5	12·9	13·8	13·9	13·3	13·1	13·6	14.2	14·5
11	14·5	14·9	14·8	13·9	12·9	12·9	13·5	14·7	15·5	15·3	14·5	13.6	13·3	13·3	13·8
12	14·3	14·3	14·2	13·3	12·7	12·7	13·3	14·0	14·2	14·0	13·3	12·7	12·9	13·7	14·1
13	14·6	14·5	14·1	13·3	12·9	13·9	14·9	15·7	**15·9**	15·6	14·5	13·6	13·3	13·7	14·2
14	14·2	14·3	13.8	13·0	13·0	13·3	13·5	14·1	14·1	15·8	13·3	12·9	13·0	13·5	13·8
15	13·7	13·7	13·8	13·5	13·2	13·1	13·2	14·0	14·5	14·7	14·5	13 8	13·4	13·4	13·7
16†	13·9	14·0	13·8	13·3	13·5	13·8	14·3	14·8	15·0	14·6	13·7	13·4	13·8	13·9	14·1
17	14·4	14·5	14·4	13·7	13·7	13·7	13·9	14·8	15·3	14·9	14·2	13·7	13·7	13·5	13·7
18	14·0	14·1	14·0	13·3	12·8	12·9	13·7	14·3	14·8	14·6	13·9	13·4	13·7	13·9	14·0
19	13·5	13·5	14·1	13·7	13·5	14·1	14·5	14·9	15·5	15·6	14·3	13·6	13·5	13·6	13·9
20	13·6	13·0	12.7	12·6	12·6	13·4	13 9	14·3	15·1	15·3	14·4	13·3	13·2	13·5	13·9
21	13·7	13·7	13·7	13·6	12.8	12·7	12·8	13·5	14·2	14·0	12·4	**11·2**	13·0	13·5	13·7
22	13·2	13·7	12·7	11·9	12·2	12·6	13·4	14·6	15·0	15·1	13·9	13·6	13·1	13·8	13·9
23	14·1	14·2	13·7	13·3	13·1	13·3	13·1	14·8	15·3	14·9	14·1	13·3	13·6	13·7	13·9
24	13·2	13·1	12·7	12·7	13·4	14·3	14·0	14·4	15·0	15·1	14·7	13·7	13·8	13·7	13·9
25	13·9	13·6	13·2	12·7	12·5	12·5	12·6	13·6	13·8	13·9	13·6	13·3	13·7	13·7	13·7
26	13·6	13·5	12·9	12·3	12·4	13·4	14·3	15·4	15·7	15·3	14·4	13·6	13·6	13·9	14·1
27	14·3	14·5	14·3	13·6	13·2	12·8	13·4	13·9	14·4	13·9	13·2	13·5	13·8	13·6	14·4
28	13·7	13·6	13·1	12·8	12·9	13·1	13·6	14·1	14·7	14·4	13·9	13·4	13·2	13·5	13·6
29	14·0	13·7	13·1	12·4	12·1	12·2	12·9	14·3	15·6	15·5	14·4	13·7	13·9	13·9	13·8
30	14·0	13·7	12·8	11·7	11·4	11·6	13·1	14·8	15·7	15·7	15·2	14·5	14·0	13·9	13·7
31	13·9	13·7	12·8	11·7	11·4	11·6	13.1	14·7	15·7	15·6	15·2	14·5	14·0	14·0	14·0
Mean .	13·9	14·0	13·7	13·1	**12·8**	13·0	13.4	14·2	**14 8**	14·7	14·1	13·6	13·6	13·8	14·0
Mean† .	14·1	14·2	14·1	13·5	**13·0**	13·2	13.6	14·3	**14·9**	14·5	14·0	13·6	13·7	13·9	14·0

APRIL.

1	14·2	14·1	13·5	13·2	13·0	13·1	13·3	14·4	15·7	15·5	14·3	13·5	13·5	13·6	13·6
2	13·8	13·6	13·2	12·7	12·7	13·5	14·5	15·8	16·8	16·3	15·1	14·0	13·5	13·7	14·2
3	13·9	14·1	13·4	12·8	12·3	12·2	13·5	15·2	16·3	15·9	14·8	13·4	12·7	13·8	14·3
4	13·9	14·1	13·6	13·3	13·7	13·7	14·0	15·4	15·9	15·1	13·7	13·1	13·4	13·7	14·4
5	13·5	13·2	12·4	11·5	11·4	12·7	14·4	15·5	16·2	15·7	14·4	13·9	13·9	14·4	14·4
6	13·6	13·3	12·9	12·5	12·2	12·4	13·5	14·5	15·4	15·6	15·2	14·2	14·1	14·4	14·4
7	14·2	14·0	13·3	12·6	12·2	12·7	14·2	15.7	15·9	15·5	14·9	14·3	14·1	14·3	14·3
8	13·9	13·6	12·8	12·3	12·5	13·6	14·5	14.9	15·3	15·5	15·0	14·2	14·0	13·9	14·2
9	14·3	13·7	12·7	11·6	11·3	12·2	14·0	15.0	15·3	15·0	14·3	13·8	13·6	13·8	13·6
10	14·1	13·6	12·6	12·2	12·3	12·9	13·5	14·6	15.4	16·0	15·6	14·5	14·2	13·9	13·8
11†	14·0	13·9	13·0	12·2	12·1	12·5	13·9	15·2	16·2	16·2	15·3	14·2	13·4	13·4	13·7
12†	13·9	13·5	12·9	12·3	12·5	13·4	14·4	16·4	16·6	16·1	15·4	14·5	13·9	13·6	13·9
13†	13·7	13·3	12·0	11·0	10·9	11·9	13·7	15·4	16·0	15·9	15·3	14·8	14·4	14·1	14·1
14	14·1	13·8	12·8	12·3	12·8	12·3	14·6	15·7	15·9	15·8	15·2	14·4	14·0	13·9	14·3
15	13·3	13·1	13·0	11·3	12·0	13·3	15·1	16·2	16·2	15·8	14·9	14·0	13·7	13·9	14·1
16	12·5	11·9	10·8	**10·8**	11·2	12·6	14·2	15·6	15·4	15·3	14·7	14·4	14·0	14·1	14·0
17	13·3	13·1	12·6	12·1	12·2	12·7	14·4	15·3	15·6	15·4	15·1	14·3	13·8	13.4	14·5
18	12·3	13·0	12·8	12·7	12·7	13·0	14·2	15·4	15·3	14·7	14·4	14·0	13·7	13·7	13·8
19	13·3	.3·2	12·3	11·8	11·9	12·9	14·6	15·0	15·2	14·8	14·2	14·4	13.4	13·2	13·9
20	13·8	13·4	12·9	12·7	12·4	13·2	13·7	16·2	16·4	15·5	14·4	13·8	13·7	14·3	14·1
21	13·4	1 ·0	12·1	11·9	12·0	12·6	13·9	15·3	15·6	15.7	15·2	14·3	14·0	14·0	14·3
22	13·6	13·1	12·4	12·1	12·8	13·9	14·9	15·1	15·4	14·9	14·7	14·3	13·9	14·0	14·2
23	13·8	13.7	12·8	12·2	12·3	13·3	14·3	15·5	15·9	15·7	15·5	15·0	15·8	14·6	14·0
24	13·9	13·9	13·3	12·9	13·0	14·0	15·4	16·3	16·6	16·0	15·2	14·1	13·8	13·9	14·0
25	13·7	13·1	12·7	12·6	13·1	14·1	15·3	16·3	**16·9**	16·3	15·5	14·4	13.7	13·5	13·9
26	13·7	12·9	11·9	11·9	13·0	14·5	15·7	16·4	16·3	15·9	15·3	14·9	14·4	13·9	14·0
27	13·8	13·0	12·4	12·7	14·0	15·3	16·1	16·6	16·3	16·1	15·5	14·8	13·9	13·9	14·2
28†	13·5	13·1	12·1	12·2	13·6	15·1	15·8	16·0	16·1	15·8	14·9	14·4	14·0	14·3	14·7
29†	13·7	13·1	12·1	12·3	13·1	14·1	15·1	16·0	16·1	15·5	14·5	14·0	13·8	14·0	13·9
30	13.3	12·6	11·7	11·5	12·5	14·0	14·9	15·4	15·7	15·8	15·1	14·1	14·0	14·3	14·5
Mean .	13·7	13·4	12·6	**12·2**	12.5	13·3	14·5	15·5	**15·9**	15·6	14·9	14·2	13·9	13·9	14·1
Mean† .	13·7	13·4	12·4	**11·9**	12·4	13·4	14·6	15·8	**16·2**	15·9	15·1	14·4	13·9	13·9	14·1

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
14·1	14·1	13·8	13·7	13·7	13·7	13·7	13·7	13·7	13·7	5 30	11·9	9 20	14·8	1
14·0	14·2	14·1	14·0	14·0	14.0	13·8	13·9	13·9	13·8	4 14	12·7	0 30	14·3	2
14·4	13·9	13·9	14·0	13·9	14·1	14·0	14·0	13·7	**14·2**	0 0	13·7	10 0	15·1	3
13·9	13·9	13·7	13·7	13·5	13·5	13·7	13·7	13·7	13·9	18 30	13·5	8 52	15·3	4
13·9	13·9	14.0	14·0	13·9	13.7	13·7	13·7	14·0	13·9	3 20	12·9	8 0	15·7	5†
13·7	14·0	14·1	14·0	14·1	14·1	14·1	14·1	14·3	13·9	4 30	12·4	7 30	15·3	6†
14·4	14·3	14·1	13·9	14·0	14·0	14·0	14·1	14·4	14·1	4 2	12·9	7 30	14·8	7†
14·0	13·7	13·7	13·8	13·7	13·7	13·7	13·7	13·7	13·8	4 24	12·4	8 30	14·7	8
14·0	14·0	13·9	13·9	13·9	13·8	13·8	13·9	13.9	13·6	5 10	12·1	1 42	14.5	9†
14·4	14.4	14·3	14·2	14·1	14·1	14·3	14·2	14·1	13·7	5 14	12·0	1 30	14·5	10
14·0	13·8	13·8	13·8	13·8	13·9	14·0	14·0	13·1	14·0	4 30	12·7	8 10	15·6	11
14·5	14·1	14·0	14·0	13·8	13.8	13·8	14·3	14·1	13·7	10 58	12·5	23 30	14·7	12
13·9	13·5	13·5	13·8	13·8	13·8	13·9	14·0	14·1	14·1	3 54	12.8	8 30	**16·2**	13
13·8	13·7	13·8	13·8	13·7	13·7	13·5	13·7	13·7	13·6	3 20	12·9	1 10	14·6	14
13·8	13·8	13·8	13·8	13·8	13·7	13·7	13·8	13·8	13·7	5 30	13·0	8 50	15·0	15
14·3	14·1	14·1	14·2	14·0	14·0	14·0	14·1	14·1	14·0	3 30	13·1	7 50	15·1	16†
14·0	14·0	13·8	13·7	13·7	13·7	14·0	14·0	14·0	14·0	4 10	13·5	7 30	15·3	17
13·7	13·7	13·9	13·7	13·7	13·8	13·9	13·7	14·1	13·8	4 24	12·6	8 30	15·2	18
14.1	13·9	13·8	13·2	13·6	13·0	13·3	13·2	13·6	13·9	20 20	12·5	8 50	15·8	19
13·9	13·8	13·6	12·7	12·9	13·7	13·6	13·6	13·7	13·6	3 34	12·2	8 36	15·6	20
13·7	13·7	13·6	13·7	13·7	13·7	13·6	13·5	13.6	**13·4**	10 20	12·1	8 20	14·5	21
13·7	14·0	14·0	14·0	14·0	13·7	14·2	14·2	14·1	13·7	3 4	11·8	8 52	15·5	22
13·7	13·7	13·5	13·6	13·7	13·1	13·0	13·5	13.6	13·7	3 34	12·9	7 30	15·6	23
13·6	13·6	13·4	13·5	13·6	13·1	13·0	13·5	13.6	13·7	3 16	12·5	8 30	15·7	24
13·7	13·8	13·8	13·6	13·6	13·7	13·7	13.7	13·7	13·5	3 44	12·2	8 30	14.4	25
14·4	14·4	14·1	14·0	13·9	13·9	13·9	13·9	14·1	14·0	3 24	12·2	7 30	15·7	26
14·7	14·7	13·8	13·6	13·6	13·4	13·5	13.7	13·9	13·8	5 2	12·7	14 30	15·3	27
13·6	13.8	13·7	13·7	13·6	13·6	13·8	13·8	13·9	13·7	3 40	12·7	8 0	14·9	28
13·8	13·6	13·8	13·8	13·8	13·8	13·8	13·8	14·3	13·7	4 2	12·0	8 10	15·6	29
13·5	13·5	13·7	13·9	13·8	13·8	13·8	3·9	13.9	13·7	2 24	12·4	8 2	16·0	30
14·0	14·2	14·2	14·1	14·1	14.0	13.9	13·9	14·1	13·9	4 10	**11·3**	8 20	15·9	31
14·0	13·9	13·9	13·8	13·8	13·7	13 8	13·8	13·9	13·8					Mean.
14·0	14·0	14·0	13·9	13·9	13·8	13·8	13·9	14·0	13·9					Mean†.

APRIL.

14·0	14·0	13·7	13.7	13·6	13·6	13·8	13.9	13·7	13·8	3 40	13·0	8 30	16·2	1
14·3	14.0	14·0	13·9	13·6	13·5	13·5	13·5	13·5	14·0	3 10	12·7	8 0	17·0	2
14·1	14·0	13·9	13·5	13·4	13·2	13·4	13·4	13·7	13·8	4 58	12·0	8 14	16·5	3
14·4	14.2	13·7	13·4	13·4	13·3	13·4	13·5	13·7	13·9	4 30	12·5	7 40	16·2	4
14·4	14·2	14.0	13·6	13·5	13·4	13·5	13·6	13·7	13·8	3 20	11·3	8 6	16·4	5
14·4	14·4	14·2	13·9	13·9	14·0	14·0	13·9	14·0	14·0	4 16	12·0	9 10	15·7	6
13·9	13·7	13·5	13·5	13·6	13·6	13·4	13·4	13·6	13·9	4 4	12·1	7 54	16·2	7
13·9	13·7	13·7	14·0	13·9	13·7	13·7	13·8	14·0	13·9	2 56	12·2	9 0	15·8	8
13·8	14·0	13·8	13.8	13·8	13 8	13·8	13·9	14·1	13·7	4 18	11·3	8 24	15.6	9
13·6	13·9	13·8	14.6	14·7	14·6	13·8	13·9	13·9	14·0	3 10	12·0	9 16	16·2	10
14·1	14·1	14·0	13·8	13·7	13·7	13·8	13·9	13·9	13·9	3 14	12·1	8 4	16·4	11†
14·2	14·2	14·1	14·0	14·0	13·9	13·8	13·7	13·8	14·1	3 30	12·1	7 30	**17·0**	12†
14·1	14·2	14.1	14·1	14·1	14·0	14·0	14·0	14·0	13·9	3 30	10·8	7 58	16·1	13†
14·1	14·1	13 8	13·5	13·5	13·3	13·5	13·3	13·3	13.9	2 58	12·3	7 30	15·9	14
14·2	14·2	14·1	14·1	14·1	12·5	12·3	11·4	12.2	13·7	3 30	11·0	7 20	16·4	15
13·8	13·9	13·8	13·8	13·7	13·3	13·1	13·3	13·3	**13·5**	2 48	**10.7**	7 20	15·9	16
14·3	14·6	14·2	13·9	13 6	13·9	13·9	13·9	13·5	13·9	2 46	12.0	7 34	15·9	17
14·0	13·9	13·8	13·7	13·5	13·3	13·1	12·9	13·1	13·6	3 6	12·5	7 30	15·9	18
14·2	13·9	13·9	13·7	13·4	13·4	13·3	13·6	13·9	13·7	3 0	11·7	8 10	15·5	19
13·6	13·4	13 3	13·4	13·4	13·2	13.4	13·5	13.7	13·8	4 10	12·4	7 44	17·0	20
14·5	14·5	14·1	13·7	13·8	13·4	13·5	13·2	13·9	13·8	3 14	11·7	7 30	15·8	21
14.4	14·4	14·2	14·1	13·9	13·9	14·0	13·9	13·8	14·0	2 30	11·9	7 30	15·7	22
14.2	14·2	14·1	13·9	13·8	13·9	13·3	13.3	13·7	14·1	3 30	11·9	7 30	15·9	23
14·1	13 7	13 7	13·5	13·6	13·6	13·7	13·7	13·9	14·2	3 20	12·9	7 30	17·0	24
14.1	13·9	13·9	13·8	13·6	13·4	13·4	13·4	13·6	**14·9**	2 48	12·5	7 30	16·9	25
14.7	14·3	13·9	13·8	13·7	13·7	13·5	13·7	13·8	14.1	2 22	11·6	7 0	16·4	26
14·3	14·1	14·0	13·9	13 8	13·8	13·6	13·6	13·5	14·3	2 24	12·1	6 54	16·7	27
14·6	14·5	14·1	14·0	13·8	13·7	13·6	13·5	13·6	14·2	2 16	11·6	7 30	16·4	28†
14·1	14·3	14·1	13·9	13·8	13·7	13·7	13·6	13·7	14·0	2 22	11.8	7 30	16·3	29†
14·6	14·5	15·0	14·5	13·8	13·1	12·5	12.7	12·3	13.8	2 48	11.2	8 30	15·8	30
14·2	14·1	13·9	13·8	13·7	13·6	13·5	13·5	13·6	13·9					Mean.
14·2	14·3	14·1	14·0	13·9	13·8	13·8	13·7	13·8	14·0					Mean†.

*See footnote on page B-5.

†Five international quiet days.

DECLINATION (WESTERLY), 1933.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.). 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	11·7	12·0	11·7	11·8	12·9	14·2	15·5	15·9	16·6	16·8	16·7	15·9	15·9	16·3	14·0
2	12·0	11·8	11·7	11·8	12·1	13·3	14·3	14·8	14·6	14·5	13·5	13·0	13·2	13·7	13·9
3	13·6	13·3	12·6	12·7	12·9	13·7	14·3	14·3	14·4	14·2	13·5	12·9	12·7	13·3	14·0
4	13·4	12·7	12·2	12.3	12·6	13·8	14·7	14·8	14·6	14·3	13·6	13·0	13·7	14·5	14·3
5	13·1	12·3	11·6	11·9	12·6	13·8	14·8	15·7	15·3	14·5	14·0	13·6	13·7	13·9	14·1
6	13·8	13·2	12·0	12·2	13·4	14·4	15·0	15·4	15·7	15·5	14·7	13·5	13·4	13·4	13·0
7	13·7	13·6	12·4	11·7	12·5	14·0	15·0	15·7	15·9	15·5	14·7	13·8	13·5	13·6	13·8
8	13·7	13·5	12·3	11·6	12·7	14·3	15 6	16·5	16·8	16·1	15·0	14·3	14·0	14·0	14·0
9†	13·7	13·1	12·1	11·3	12·0	13.7	15·3	16·1	16·3	15·5	14·6	13·6	13·5	13·7	14·2
10†	13·9	13·1	12·2	12.3	13·5	14·8	15·9	16·4	16·3	15·6	14·5	13·7	13·4	13·6	14·0
11	13·6	12·7	12·0	12·5	14·1	15 1	15·9	16·7	17·3	16·2	15·2	14·1	13·4	13.6	14·0
12†	13 8	13·3	12·3	12.6	12·1	14·3	16·1	16·5	16·7	16·4	15·8	15.1	14·5	14.2	14·5
13	13·8	13·7	12·7	12·0	12·2	13·5	15·2	16·1	16·7	16·0	15·3	14·7	14·3	14·0	14·3
14	13·3	13·4	12·9	12·9	13·7	15·1	16·4	17·0	17·5	16·3	15·4	14·8	14·5	14·5	14·5
15	13·0	12·6	11·9	11·6	12·1	13·6	14·9	15·7	15·9	15·4	14.7	14·5	14·3	14·6	14·8
16	13·7	13·2	12·7	13·0	13·5	14·1	14·8	15·4	15·5	15·3	15·6	13·8	13·6	13·6	14·5
17	13·3	12·8	12·3	11·9	12·5	14·0	15·0	16·2	16·3	15·9	15·1	14·7	14·6	14·6	14·9
18	12·7	12.7	12·0	12·2	13·8	15·1	15·9	16·6	15·1	15·5	14·4	14·0	14·4	14·6	14 8
19	13·9	13·5	12·7	12·7	13·1	14·2	15·4	16·1	16·7	16·4	15·4	14·9	14·4	14·0	14·4
20	13·7	13·0	12·6	12·7	13·6	14·8	15·5	16·2	15·9	15·2	14.4	14·0	14·1	14 6	14·8
21	13·7	13·1	12·6	12·6	13·1	14·7	16·0	16·5	16·7	16·5	15·5	14·9	14·2	13·9	14·5
22	13·6	13·2	12·2	11·5	12·1	14.1	15·2	15·7	15·7	15·0	14·4	14·8	13 6	13·9	14·2
23	13·9	12·6	12·0	12·0	12·8	14·9	17·2	**18·3**	17·5	16·3	15·3	14·2	13·6	13·1	14·7
24†	13·5	12·6	11·7	11.9	12·6	14·1	15·6	16·9	17·8	17·3	16·2	14·8	14·5	14·5	14·9
25	13·8	12·7	11·9	11·6	12·7	14·9	16·3	16·8	16·7	16·0	15·4	14·5	14·2	14·3	14·9
26†	13·8	12·9	12.2	12·2	13·1	14·6	15·2	16·9	16·7	15·5	14·5	14·3	13·6	13·9	14·7
27	13·9	12·5	11·2	**11·0**	11·8	14·3	16.5	17·4	17·4	16·7	15·8	14·6	14·0	14·1	15·0
28	13·3	12·3	11·6	11·7	12·3	13·4	14·6	15·7	16·4	15·6	14·7	14·4	14·3	14·3	14·5
29	13·8	12·8	12·1	11·8	12.6	14·5	16·7	17·2	16·9	16·5	15·1	15·6	15·4	15·1	14·9
30	13·5	12·7	12·2	12·4	12·7	13.5	15·1	16·5	16·6	16·0	15·6	15·0	14·8	14·9	14·9
31	13·5	12·9	12·3	12.2	13·4	14·6	15·3	15·3	14·6	15·0	14·8	14·4	14·2	14·3	14·1
Mean . .	13.5	12·9	12·2	**12·1**	12·8	14·2	15·5	16·2	**16.4**	15·7	14·9	14·3	14·1	14·1	14·4
Mean† . .	13·8	13.0	12·1	**12·1**	12·7	14·3	15·6	16·6	**16·8**	16·1	15·1	14·3	13·9	13·9	14·5

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1	13·5	12·7	11·9	12·1	12·7	13·8	14·7	15·0	15·3	15·3	15·1	14·5	14·4	14·4	14·3
2	13·5	12·7	12·1	11·9	12·7	13·8	14·8	15·9	16·9	16·5	15·4	13·6	13·9	14·4	14·5
3	13·9	13·5	13·3	13·2	13·7	14·7	14·2	15·5	15·5	14·8	14·1	13·8	13·4	14·0	14·3
4	13·5	12·9	12·8	13·0	13·9	15·1	16·0	16·5	16·0	15·3	14·5	13·5	13·5	14·0	14·6
5†	13·5	12·2	11·3	11·9	13·2	15·0	16·4	16·8	16·4	15·4	14·6	14·1	14·0	14·2	14·6
6†	13·5	12·3	11·5	11·9	12·8	14·4	15·5	16·4	16·4	15·5	14·9	14·0	14·0	14·5	1 ·9
7	13·7	12·3	11·9	12·1	12·9	14·1	15·4	16·5	15·8	15·2	14·5	13·5	13·1	13·4	14·5
8	13·5	13·0	12·7	13·0	14·2	15·8	17·4	17·2	16·8	15·1	15·3	13·9	13·5	13·7	14·5
9	12·8	11·9	12·0	12·5	13·3	15·0	15·9	16·1	16·3	16·2	16·2	15·5	14·9	14·5	14·6
10	13·2	12·2	12·1	12·8	13·4	14·4	14·9	15·6	15·5	15·9	15·5	14·6	14·4	14·5	15·3
11	13·5	12·4	11·9	12·3	13·1	15·0	16·3	16·8	16·4	15·7	14·9	14·9	15·5	15·3	15·7
12	14·6	14·1	14·0	14·2	15·1	15·9	16·5	17·0	16·9	16·9	16·9	16·3	16·0	15·5	15·9
13	13·0	12·8	12·5	12·3	12·8	13·1	14·4	15·4	15·5	16·0	16·4	15·7	16·0	15·4	15·4
14	12·8	12·7	11·9	11·4	12·1	13·6	15·0	15·9	16·6	16·7	16·0	15·4	15·0	14·5	14·8
15	13·8	13·2	12·1	12·1	13·0	14·1	15·0	15·9	16·1	16·5	16·5	16·2	15·4	14·7	14·7
16†	13·9	13·4	12·9	12·7	13·1	14·3	15·3	15·7	15·9	15·9	15·4	14·9	14·8	14·9	14·9
17	13·7	12·6	12·3	12·6	12·7	14·1	14·9	15·5	15·9	15·8	15·2	14·8	14·6	14·5	14·8
18†	14·1	13·5	12·3	11·9	12·5	13·1	14·0	14·9	15·6	15·7	15·4	14·7	14·3	14·6	14·8
19	13·8	13·7	12·9	12·6	13·0	14·1	15·5	17·0	16·5	15·7	15·2	15·0	14·8	14·8	15·0
20	13·1	12·2	12·0	12·5	13·1	13·7	14·7	15·1	15·5	16·1	15·8	16·5	16·2	15·5	15·3
21	13·1	12·5	11·7	11·9	12·5	14·3	15·2	16·0	16·7	16·7	15·7	15·0	14·2	13·9	14·7
22	13·5	12·8	11·6	**10·9**	11·9	13·4	15·2	16·3	16·7	16·7	16·1	15·1	14·2	14·3	15·1
23	14·1	13·5	12·1	11·3	12·0	13·3	14·9	16·4	16·9	16·3	15·5	14·8	14·3	14·3	14·7
24†	13·8	13·2	12·5	12·5	13·4	14·1	15·7	16·3	16.3	16·0	15·0	14·5	14·1	14·4	14·9
25	13·8	13·4	13·1	13·2	13·8	14·5	15·4	16·7	16·7	16·7	16·3	15·5	15·2	15·6	16·1
26	14·4	13·5	12·7	12·8	14·7	16·3	**17·4**	17·3	16·7	16·1	15·9	15·7	15·1	14·4	14·6
27	14·1	13·7	12·9	12·1	12·0	12·8	14·6	15·6	15·9	15·7	15·2	15·3	15·1	11·8	14·9
28	13·9	13·4	12·9	12·5	13·6	14·7	15·9	16·7	16·5	16·0	15·8	15·5	15·2	14·9	14·9
29	13·7	12·4	11·9	11·4	13·9	14·7	15·8	16·0	16·3	16·5	16·3	15·5	14·5	14·1	14·5
30	13·8	13·2	13·1	13·6	14·6	15·5	16·1	16·3	16·5	16·5	15·5	15·0	14·5	14·3	14·5
Mean .	13·6	12·9	**12·4**	12·4	13·2	14·3	15·4	16·1	**16·2**	16·0	15·5	14·9	14·6	14·5	14·9
Mean† .	13·7	12·9	**12·0**	12·1	13·0	14·2	15·4	16·0	**16·1**	15·7	15·1	14·4	14·2	14·5	14·9

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
12·5	12·1	11·1	11·9	12·4	11·1	11·9	12·1	11·8	13·5	17 14	**10·3**	12 48	17·3	1
13·9	13·9	13·7	13·7	13·7	13·5	13·3	13·5	13·6	**13·4**	0 44	11·4	7 30	14·9	2
14·4	14·2	14·0	13·6	13·6	13·5	13·3	13·7	13·4	13·6	2 10	12·4	6 30	14·5	3
14·0	13·8	13·6	13·4	13·2	13·4	13·5	13·6	13·4	13·6	2 22	12·0	6 22	14·9	4
14·0	14·4	14.1	13·9	13·8	13·5	13·6	13·4	13·8	13·7	2 10	11·6	7 10	15·7	5
13·8	13·8	13·9	13·7	13·7	13·7	13·7	13·6	13·7	13·9	2 24	11·4	7 30	15·7	6
13·7	13·7	13·8	13·8	13·8	13·9	13·9	13·9	13·9	13·9	3 6	11·6	7 34	16·3	7
14·0	14·0	13·9	13·8	13·6	13·7	13·7	13·7	13·7	14·1	2 54	11·6	8 0	17·0	8
14·3	14·3	14·2	14·2	14·2	14·0	13·9	14·0	14·0	14·0	3 12	11·1	7 58	16·6	9†
14·3	14·4	14·1	13·7	13·7	13·8	13·7	13·7	13·7	14·1	2 20	12·1	7 30	16·7	10†
14·3	15·0	14.0	13·9	13·8	13·9	14·0	14·0	14·0	14·3	2 2	12·1	7 52	17·6	11
14·6	14·5	14.5	14·4	14·1	13·8	13·8	13·7	13·7	13·4	3 10	11·5	7 30	16.7	12†
14·2	14·0	13·9	13·7	13·6	13·5	13·7	13·7	13·6	14·1	3 30	11.6	7 30	16.8	13
14·6	14·2	13·9	13·6	13·2	13·0	12·7	12·7	13·0	14·3	2 18	12.7	7 50	17·7	14
14·8	14·9	14·4	14·2	14·2	14·1	13·8	13·9	14·0	14·1	2 30	11·6	7 30	16·2	15
14·5	14·3	14·2	13·7	13·7	13·7	13·5	13·3	13·5	14·0	1 56	12·5	7 30	15·6	16
14·9	14·8	14·5	14·0	14·0	13·5	13·3	13·2	12·9	14·1	3 20	11·7	7 22	16·5	17
14·7	14·5	14·5	14·2	14·1	13·9	13·9	13·8	14·0	14·3	2 24	11·3	7 8	17.0	18
14·5	14·6	14·5	14·2	14·1	13·9	13·7	13·7	13·7	14·4	2 24	12·4	8 12	17·1	19
14·7	14·6	14·2	14·1	14·1	14·1	13·9	13·8	13·9	14·3	2 12	12·5	7 0	16·3	20
14·6	14·5	14·3	14·7	13·9	14·0	14·1	14·1	13·9	14·4	3 20	12·5	6 38	16·7	21
14·3	14·4	14·2	14·1	13·9	13·9	13·8	13·8	14·1	14·0	2 42	11·5	7 50	16·1	22
14·7	14·5	14·3	14·4	14·2	14·0	13·9	14·2	14·0	14·5	2 10	11·9	7 0	**18·5**	23
15·0	15·0	14·7	14·5	14·5	14·1	13·9	13·8	13·8	**14·5**	2 30	11.6	7 54	18·1	24†
15·0	14·9	14·6	14·5	14·4	14·2	14·1	13·9	14·0	14·4	2 50	11·3	7 20	16·9	25
14·8	14·6	14·4	14·3	14·2	14·0	14·0	14·1	14·1	14·3	2 30	11·8	7 20	17·0	26†
15·3	15·4	14·5	14·3	13·9	14·0	13·8	13·6	13·6	14·3	2 30	10·8	7 20	17·5	27
14·4	14·4	14·4	14·2	14·2	14·0	14·0	14·0	14·0	14·0	2 10	11·4	8 0	16·5	28
14·5	14·1	14·1	13·8	13·5	13·4	13·4	13·4	13·7	14·4	3 0	11·7	6 30	17·5	29
14·9	14·9	14·4	14.4	13·9	13·8	13·7	13·6	13·5	14·3	2 24	11.8	7 16	16·8	30
14·6	14·6	14·5	14·3	14·3	13·9	14·0	13·7	13·9	14·1	2 30	11.8	7 44	15·8	31
14·4	14·4	14·1	14·0	13·9	13·7	13·7	13·6	13·7	14·1					Mean
14·6	14·5	14·4	14·2	14·1	13·9	13·8	13·8	13·8	14·3					Mean†

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14·3	13·7	14·0	13·8	13·9	14·2	14·0	13·7	13·6	**14·0**	2 10	11·5	8 4	15·4	1
14·5	14·6	14·5	14·6	14·3	14.0	14.1	14·1	14·1	14·2	3 0	11·7	8 20	17·1	2
14·5	14·6	14·5	14·3	14·3	14·1	14·1	14·0	13·9	14·2	2 24	13·1	6 40	15·6	3
14·5	14·5	14·5	14·3	14·3	14·3	14·0	14·1	14·1	14·3	1 20	12·6	7 10	16·7	4
14·4	14·4	14·2	14·2	14·1	14·0	13·9	14·1	13·9	14·2	2 0	11·1	6 20	16·8	5†
14·9	14·8	14·5	14·4	14·3	14·2	14·2	14·0	13·9	14·3	2 22	11·3	7 30	16·6	6†
14·9	14·8	14·7	14·5	14·4	14·3	14·1	14·1	14·1	14·1	2 10	11·8	6 54	16·6	7
14·6	14·6	14·5	14·3	13·9	13·7	13·3	12·8	13·0	14·3	1 30	12·6	6 0	17·3	8
14·5	14·4	14·2	14·1	13·9	13·8	13.7	13·7	13·6	14·3	2 14	11·9	8 0	16·3	9
15·0	14·5	14·4	14·4	14·2	14·0	13·9	13·9	13·7	14·3	1 30	12·0	7 8	15·9	10
15·7	15·7	15·5	15·4	15·2	15·1	15.0	14·9	14·8	14·9	2 0	11.9	6 30	16·9	11
16·0	15·9	15·5	15·4	15·3	15·1	14·7	14·3	14·3	**15·5**	1 38	12·8	6 30	16·1	12
14·8	14·1	14·1	14·1	13·9	13·5	13·1	13·3	12·8	14·2	2 52	11·9	10 50	16·9	13
14·8	14·8	14·5	14·3	14·2	14·6	13·9	13·9	13·8	14·3	3 0	11·2	9 10	16·8	14
14·7	14·6	14·1	14·2	13·9	13·8	13·7	14·0	13·7	14·4	2 20	11·9	9 30	16·7	15
14·9	14·9	14·6	14·4	14·1	14·1	14·0	13·9	13·9	14·5	3 0	12·6	7 30	16·0	16†
14·9	14·8	14·5	14·3	14·1	13·8	13·6	13·8	14·3	14·3	1 58	12·0	7 50	16·1	17
14·7	14·4	14·3	14·1	13·9	13·9	13·9	14·0	13·9	14·1	3 6	11·4	8 30	15·8	18†
14·9	14·8	14·7	14·2	13·6	13·1	12·7	12·8	13·0	14·3	2 38	12·3	7 10	17·3	19
14·7	14·5	14·7	14·5	14·2	14·0	13·6	13·4	13·5	14·4	1 24	11·7	11 30	16·8	20
15·0	15·0	14·8	14·6	14·4	14·2	13·8	13·6	13·7	14·3	2 10	11·6	8 30	17·0	21
15·1	14·8	14·5	14·3	14·2	14·2	14·0	14·0	14·2	14·3	2 50	**10·8**	7 50	16·9	22
14·8	14·6	14·5	14·6	14·4	14·3	14·2	14·0	14·1	14·3	2 50	11·2	7 30	17·1	23
15·1	14·9	14·6	14·4	14·3	14.3	14·1	14·0	13·9	14.4	2 25	12·3	7 50	16·4	24†
15·9	15·3	14·8	14·2	14·0	13·7	14·1	14·0	14·1	14·9	2 30	13·1	7 30	17·2	25
14·7	14·3	14·4	14·2	14·2	14·3	14·3	14·3	14·1	14·8	2 30	12·3	6 25	17·6	26
15·0	15·1	15·1	14·9	14·6	14·5	14·3	14·3	14·1	14.4	3 22	11·8	8 30	16·0	27
14·7	14·4	14·4	14·5	14·5	14·4	14·2	14·2	13·9	14·7	3 14	12·4	7 30	16·9	28
14·6	14·6	14·9	14·5	14·4	14·3	14·1	14·1	14·1	14·5	2 14	11·7	9 50	16·5	29
14·9	14·9	15·0	14·7	14·5	14·4	14·2	14·2	14·3	14·8	2 0	12·9	8 34	17·0	30
14·9	14·7	14·6	14·4	14·2	14·1	14·0	13·9	13·9	14·4					Mean
14·8	14·7	14·5	14·3	14·1	14·1	14·1	14·1	13·9	14·3					Mean†

*See footnote on page B-5.
†Five international quiet days.

DECLINATION (WESTERLY), 1933.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	14·3	13·9	13·2	12·5	12·8	13·8	14·6	15·8	16·6	16·6	15·8	15·2	14·5	15·1	15·2
2	14·3	13·5	12·6	12·3	13·6	15·5	17·1	18·0	17·6	17·1	16·1	15.3	15·2	14·9	15·2
3	14·3	13·8	12·9	12·3	12·5	13·4	15·1	16·8	17·5	17·3	16·6	15·8	15·2	15·2	15·2
4	14·1	13·2	12·4	11·9	13·1	14·7	15·9	16·8	17·2	16·9	16·2	15·2	14·7	14·8	15·1
5	14·1	13·2	12·2	12·0	12·3	13·7	15·7	16·4	16·3	16·1	15·7	14·9	14·8	15·0	15·4
6	14·1	13·2	12·5	12·2	12·7	13·7	14·9	15·3	15·8	16.3	16·0	15·5	15·2	15·1	15·2
7	14·3	13·5	12·4	12·0	12·1	13·5	14·8	15·9	16·0	15·7	15·3	15·1	14.7	14·9	15·3
8	14·3	13·5	12·3	12·0	12·9	14·3	16·1	17·3	17·2	16·5	16·3	15·9	15·4	15·1	15·3
9	13·7	12·9	12·8	12·6	13·5	14·6	15·4	16·4	17·3	17·7	16·8	15·6	15·0	14·3	14·6
10	14·0	12·6	11·9	12·1	12·9	14·6	15·6	16·4	17·2	17·3	16·9	16·4	15·8	15·3	15·3
11	14·2	13·4	12·6	12·5	13·1	14·2	15·7	16·7	17·1	17·4	17·3	16·4	15·4	15·2	15·5
12	14·1	13·2	12.1	12·3	13·3	14·6	16·1	17·7	18·5	18·3	17·7	16·8	15·8	14·9	15·0
13†	14·3	13·7	13·1	13·3	14·0	15·5	16·9	17·7	18·3	18·1	17·1	15·7	14·8	14·9	15·3
14†	14·4	14·0	13·0	12·6	13·1	14·2	15·5	16·7	17·4	17·2	16·2	15·5	15·1	15·1	15·3
15†	14·5	14·0	13·1	12·9	13·8	14·4	14·7	17·6	18·5	17·8	17·0	15·7	14·6	14·5	15·2
16	14·2	13·3	12·3	12·3	12·9	14·1	15·7	16·5	16·5	15·7	15·3	15·7	15·6	15·6	15·8
17	14·5	13·8	13·2	13·5	14·2	14·8	15·0	15·3	16·3	16·2	16·0	15·1	14·7	14·9	15·1
18	14·6	14·1	14·1	14·2	15·2	16·5	16·5	16·5	17·1	16·4	15·8	15·1	14·8	14·9	15·2
19	14·4	13·8	13·0	13·1	14·5	15·4	15·9	16·6	17·3	16·9	16·4	15·6	15·1	15·1	15·1
20	14·3	13·4	13·1	12·8	13·8	15·3	16·1	16·7	17·3	17·4	17·1	16·1	15·2	15·0	15·1
21†	14·6	13·4	12·3	12·6	13·8	15·7	17·3	18·0	18·0	17·5	16·5	15·7	14·9	14·8	15·4
22	14·4	13·3	13·0	13·2	13·4	15·3	16·5	17·5	17·4	17·0	15·7	16·0	14·8	14·7	15·1
23	14·3	13·4	12·5	12·3	13·5	16·1	17·6	17·8	17·6	17·3	16·2	14·4	14·0	14·6	14·4
24	14·0	12·9	12·0	12·7	14·5	15·8	16·7	17·4	16·7	17·0	15·9	15·6	15·3	14·5	15·1
25	14·3	13·6	13·1	13·1	13·6	14·8	15·5	16·2	17·2	17·3	16·7	15·3	15·0	14·3	14·7
26	14·5	13·5	12·5	12·3	12·9	14·4	16·2	17·6	18·4	17·4	16·2	15·7	15·3	15·1	15·3
27	14·5	13·5	12·5	12·3	12·9	14·4	16·2	17·6	18·4	18·5	17·4	16·0	14·6	14·0	14·5
28	14·5	13·7	12·5	12·3	12·7	13·2	14·9	16·1	16·7	16·4	16·2	15·7	15·3	15·1	14·9
29	14.1	13·4	12·4	12·2	13·0	14·8	17·0	16·8	16·4	16·3	16·3	15·5	15·0	14·5	14·9
30†	14·2	13·5	12·4	11·7	12·5	13·1	15·5	16·5	16·7	16·3	16·0	15·3	14·4	14·1	14·4
31	14·2	13·3	12·2	11·9	12·7	14·1	14·8	15·8	16·5	16·1	15·3	14·8	14·3	14·2	15·1
Mean .	14·3	13·5	12·7	12·5	13·3	14·6	15·9	16·8	17·2	17·0	16·3	15·6	15·0	14·8	15·1
Mean† .	14·4	13·7	12·7	12·5	13·4	14·5	15·9	17·3	17·8	17·4	16·6	15·5	14·7	14·7	15·2

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1†	14·7	13·7	12·9	13·0	13·6	14·9	16·5	17·9	17·8	17·2	16·5	15·7	15·0	15·1	15·5
2	14·3	13·7	13·2	13·3	13·9	15·2	16·5	17·0	17·0	16·6	15·9	15·2	14·5	14·3	15·1
3	14·4	13·4	12·9	13·2	14·8	17·2	18·2	18·4	18·2	16·8	15·9	15·2	15·0	15·2	15·4
4	14·2	13·7	12·9	13·7	14·9	16·4	16·7	16·3	16·0	15·9	15·4	15·0	14·9	15·0	15·2
5	13·9	13·3	12·9	12·7	13·5	15·1	16·8	17·2	17·2	16·7	16·2	16·4	16·6	14·9	14·6
6	12·4	11·3	11·1	11·3	13·8	14·9	15·7	16·1	17·1	16·7	15·7	14·9	14·3	13·9	14·4
7	14·1	13·1	12·4	12·4	13·6	15·1	16·6	17·2	17·5	16·8	16·0	14·6	14·0	14·5	15·1
8	14·3	13·5	12·4	12·0	13·1	14·3	15·4	16·6	17·1	16·8	16·3	15·6	15·1	14·6	15·1
9†	14·3	13·7	12·7	12·2	13·2	15·8	17·6	18·5	18·2	17·5	17·3	16·1	15·2	14·9	15·2
10†	14·7	13·9	13·0	12·7	12·9	14·3	15·9	16·6	17·3	17·4	17·0	16·2	15·9	15·4	15·2
11†	14·7	14·0	13·1	12·9	13·8.	15·1	16·8	17·4	17·7	17·2	16·7	15·6	15·1	14·9	15·0
12	14·7	14·3	13·3	12·7	12·6	14·0	15·3	16·2	16·4	16·7	16·4	15·6	15·1	15·1	15·4
13	14·5	14·0	12·9	12·8	13·8	15·5	16·4	17·4	17·6	17·4	17·3	16·1	15·8	15·3	15·3
14	14·5	13·4	12·4	12·0	12·6	13·8	15·3	16·0	16·3	16·4	15·9	15·0	14·3	14·3	14·3
15	14·7	13·9	13·2	12·7	13·1	14·6	15·6	16·1	15·7	15·3	15·2	14·8	14·2	14·3	14·9
16	14·5	13·9	12·9	12·7	14·0	15·1	16·1	16·7	16·0	16·1	15·9	15·4	15·1	15·1	15·8
17	14·5	13·9	13·3	13·4	14·0	15·1	15·4	15·9	15·2	15·2	15·1	15·0	15·0	14·9	14·9
18	14·8	13·7	12·8	13·0	13·6	14·9	16·4	17·3	17·2	16·4	15·4	14·7	14·3	14·8	15·1
19	14·2	13·4	12·9	13·0	13.9	14·5	14·7	14·8	15·1	14·9	14·3	13·9	13·7	14·1	15·5
20	14·5	13·8	13·2	13·4	14·1	15·5	16·6	17·0	16·9	16·5	16·3	15·7	14·9	14·5	15·1
21	14·3	13·7	13·3	13·9	15·0	16·1	17·7	18·4	17·8	17·1	15·8	14·9	14·4	13·9	15·0
22	14·5	13·8	12·6	12·7	13·7	15·3	17·0	17·7	17·1	16·3	15·3	14·4	13·9	14·1	14·9
23	14·2	13·2	12·3	12·0	13·1	14·5	15·8	16·9	17·0	16·7	16·4	16·1	15·2	15·1	14·9
24	14·6	13·9	13·1	13·5	14·6	15·8	16·8	17·0	17·2	16·8	16·1	15·1	14·5	14·9	15·1
25	14·7	12·9	11·6	11·9	13·9	15·9	17·6	18·9	19·3	19·0	17·9	16·7	15·5	15·2	15·1
26	15·1	14·1	12·7	12·5	13·2	14·7	15·9	17·0	17·8	17·7	16·9	15·4	14·2	14·1	15·1
27	14·7	13·7	12·7	12·7	13·5	15·1	15·5	17·5	17·5	17.1	16·0	15·3	14·6	14·8	15·4
28	14·7	14·3	13·5	13·5	14·7	15·9	17·0	17·2	17·1	17·1	16·5	15·7	15·1	14·9	15·2
29	14·0	13·6	12·4	13·0	14·8	16·3	17·1	17·9	17·9	17·6	17·0	16·1	15·4	15·2	15·2
30	14·8	14·3	13·9	14·1	14·3	14·8	15·9	16·7	16·8	16·3	15·9	15·2	14·9	15·4	15·7
31†	14·5	13·8	13·1	13·1	13·8	14·9	16·2	17·0	17·2	17·1	15·9	15·1	14·8	14·7	15·4
Mean .	14·4	13·6	12·8	12·8	13·8	15·2	16·4	17·1	17·1	16·8	16·1	15·4	14·9	14·8	15·1
Mean† .	14·6	13·9	12·9	12·7	13·5	15·0	16·6	17·5	17·7	17·3	16·7	15·7	15·2	15·0	15·3

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
15·2	15·1	14·6	14·4	14·1	14·1	14·2	14·1	14·3	14·6	3 0	12·5	8 50	17·0	1
15·0	15·0	14·6	14·6	14·4	14·4	14·5	14·3	14·3	15·0	2 50	12·2	7 10	18·1	2
15·2	15·2	14·9	14·6	14·3	14·3	14·3	14·2	14·2	14·8	2 50	12·2	7 30	17·7	3
15·1	15·1	14·9	14·7	14·4	14·2	14·2	14·2	14·2	14·7	2 36	11·9	8 30	17·3	4
15·3	15·1	15·1	14·7	14·5	14·3	14·3	14·3	14·3	14·6	2 56	11·9	6 42	16·6	5
15·3	15·2	15·0	14·6	14·4	14·3	14·2	14·4	14·4	14·6	3 20	12·1	8 30	16·3	6
15·1	15·1	15·1	14·6	14·3	14·2	14·2	14 3	14·4	**14·5**	3 24	**11 5**	7 10	16·1	7
15·3	15·4	15·3	15·2	14·9	14·3	14·3	14·1	13·8	14·9	2 40	11·8	6 54	17·3	8
15·0	15·0	14·8	14·6	14·6	14·4	14·3	14·3	14·1	14·8	2 40	12·3	8 38	18·2	9
15·4	15·5	15·3	14·8	14·7	14·9	14·5	14·8	14·4	14·9	2 8	11·7	8 12	17·4	10
15·4	15·1	15·3	15·1	14·9	14·6	14·5	14·4	14·3	15·0	3 0	12·4	9 10	17·5	11
15·1	15·1	15·0	14·8	14·7	14·7	14·6	14·5	14·3	15·1	2 40	11·8	8 5	18·6	12
15·5	15·2	14·9	14·9	14·8	14·8	14·4	14·4	14·4	**15·3**	2 32	12·7	7 52	18·3	13†
15·5	15·3	15·2	14·9	14·7	14·7	14·7	14·6	14·6	15·0	3 24	12·4	7 48	17·5	14†
15·3	15·3	15·1	15·1	14·9	14·8	14·6	14·3	14·4	15·1	2 48	12·8	8 0	18·6	15†
16·0	15·7	15·3	15·1	14·7	14·5	14·4	14·6	14·7	14·8	2 30	12·1	6 56	16·8	16
15·5	15·6	15·3	15·1	15·3	15·3	14·8	14·5	14·4	14·9	1 56	13·1	8 30	16·4	17
15·3	15·3	15·3	15·3	15·1	14·6	14·3	14·3	14·3	15·2	1 16	13·7	8 4	17·2	18
15·3	15·3	15·2	15·2	14·9	14·6	14·6	14·5	14·5	15·1	2 30	12·8	7 56	17·3	19
15·1	15·1	15·1	14·9	14·8	14·9	14·9	14·9	14·9	15·2	2 34	12·7	8 56	17·6	20
15·4	15·3	15·3	15·1	15·0	14·8	14·8	14·8	14·8	15·2	2 24	12·0	7 30	18·3	21†
15·3	15·3	15·2	15·1	15·0	14·8	15·0	14·8	14·7	15·1	2 0	12·8	7 10	17·7	22
14·9	15·1	14·8	15·0	14·8	15·0	15·0	14·4	14·5	15·0	3 10	12·3	6 34	17·9	23
14·5	14·5	15·1	15·1	15·0	14·7	14·5	14·5	14·5	14·9	1 58	11·9	6 54	17·7	24
14·9	15·0	14·9	14·7	14·6	14·5	14·3	14·3	14·4	14·9	2 16	12·9	8 30	17·4	25
15·0	14·8	14·9	15·0	14·7	14·7	14·6	14·5	14·4	15·0	2 30	12·3	7 10	18·2	26
15·0	15·1	15·1	15·1	14·7	14·7	14·6	14·2	14·9	15·0	2 54	12·2	8 34	**18·8**	27
14·8	14·8	14·9	14·9	14·7	14·6	14·5	14·4	14·5	14·7	3 0	12·2	8 18	17·0	28
14·9	15·0	15·0	14·7	14·7	14·5	14·5	14·5	14·5	14·8	2 44	12·0	6 10	17·2	29
14·9	15·1	15·0	14·9	14·9	14·9	14·7	14·6	14·3	14·6	3 10	11·5	7 42	17·0	30†
15·3	15·1	15·1	15·0	14·8	14·8	14·8	14·8	14·4	14·6	2 54	11·7	7 50	16·8	31
15·2	15·2	15·1	14.9	14·7	14·6	14·5	14·5	14·4	14·9					Mean.
15·3	15·3	15·1	15·0	14·9	14·8	14·7	14·6	14·6	15·0					Mean.†

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15·5	15·5	15·2	15·2	15·1	15·1	14·9	14·7	14·7	15·2	3 0	12·5	7 24	17·8	1†
15 2	15·1	15·1	14·8	14·7	14·4	14·4	14·7	14·5	14·9	2 10	12·6	7 50	17·	2
15.3	15·3	15·3	15·1	15·1	14·9	14·8	14·7	14·7	15·4	2 18	12·3	7 10	1 ·5	3
15 3	15·2	15·1	14·7	14·4	14·8	14·6	14·3	13·9	14·9	2 6	12·6	6 20	.6·7	4
15·5	15·8	15·8	14·6	15·2	13·9	13·6	13·9	13·4	15·0	2 56	12·3	8 4	17·0	5
14·9	15·1	14·6	14·7	14·6	14·4	14·3	14·3	14·2	**14·4**	2 56	**10·5**	8 2	17·2	6
15·1	15·2	15·2	15·1	14·9	14·9	14·7	14·6	14·4	14 9	2 12	11·8	7 20	17·3	7
15·2	15·3	15·2	15·2	15·1	14·9	14·8	14·4	14·6	14·9	2 30	11·8	7 22	16·9	8
15·3	15·3	15·2	15·1	14·9	14·8	14·7	14·7	14·5	15·3	2 56	11·9	6 49	18·3	9†
15·2	15·3	15·3	15·2	15·2	15·1	14·9	15·0	14·9	15·2	3 16	12·3	8 50	17·2	10†
15·2	15·3	15·3	15·0	14·9	14·9	14·8	14·7	14·8	15·2	3 0	12·4	7 20	17·6	11†
15 4	15·5	15·3	15·1	15·1	15·0	14·9	14·8	14·9	15·0	3 30	12·1	9 0	16·5	12
15·2	15·3	15·3	15·8	15·3	15·5	15·3	15·3	15·3	15·4	2 16	12·4	8 10	17·7	13
14·3	14·9	14·9	15·2	15·3	15·3	15·2	15·0	14·8	14·6	3 10	11·6	7 30	16·1	14
15·1	15·3	15·3	15·3	15·5	15·2	15·1	15·0	14·8	14·8	3 30	12·0	6 38	16·0	15
15·7	15·3	15·1	15·1	15·0	15·0	15·0	14·9	15·0	15·1	2 30	12·0	6 30	16·5	16
15·3	15·7	15·6	15·3	15·2	14·9	15·1	15·0	15·0	14·9	2 10	12·9	7 24	15·8	17
15·0	15·1	14·4	14·6	14·8	14·9	14·7	14·3	14·7	14·9	2 10	12·5	7 32	17·7	18
15·7	15·8	15·8	15·3	15·2	15·0	15·0	14·9	14·5	14·6	2 16	12·4	15 30	15·9	19
15·2	15·8	15·7	15·1	14·9	14·9	14·8	14·7	14·7	15·1	2 18	13·0	6 30	17·0	20
14·9	14·7	14·8	14 8	14·9	15·0	15·0	14·9	14·7	15·2	1 50	12·9	6 44	18·6	21
15·1	15·1	15·1	15·1	15·2	14·8	14·6	14·6	14·5	14·9	2 20	12·1	7 10	17·8	22
15·1	15·7	15·5	15·1	15·5	14·9	14·9	14·8	14·7	15·0	2 24	11·8	6 40	17·1	23
15·1	14·7	14·8	14·7	14·5	14·4	14·6	14·9	14·9	15·1	2 0	12·9	8 2	17·3	24
15·1	15·1	15·1	15·0	15·1	15·1	15·1	15·2	15·1	**15·5**	2 18	11·0	8 20	**19·5**	25
15·6	15 7	15·5	15·1	15·1	15·2	14·9	14·9	14·9	15·1	2 38	12·0	8 20	17·9	26
15·4	15·4	15·3	15·2	15·1	15·1	14·9	14·9	14·9	15·1	2 30	12·0	6 50	17·6	27
15·2	15·2	15·1	15·1	14 9	14.7	.4·7	14·7	14·6	15.2	2 24	13·2	5 50	17·1	28
15·3	15·2	15·2	15·1	15·0	14·9	14·9	15·0	15·0	15·4	2 20	12·0	7 4	18·0	29
15·7	15·6	15·2	15·1	15·1	15·0	14·9	14·7	14·7	15·2	2 4	13·5	7 50	16·9	30
15·4	15·5	15·4	15·2	15·0	14·9	14·8	14·7	14·6	15·1	2 20	12·8	8 30	17·4	31†
15·2	15·3	15·2	15·1	15 0	14·9	14·8	14·7	14·7	15·1					Mean.
15·3	15·4	15·3	15 1	15·0	14·9	14·8	14·7	14·7	15·2					Mean.†

*See footnote on page B-5.
†Five international quiet days.

DECLINATION (WESTERLY), 1933.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G.M.T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	14·6	13·6	12·9	13·2	14·7	16·2	17·7	18·0	17·0	15·9	14·9	14·1	14·5	15·1	15·4
2	14·2	13·3	11·9	11·5	13·4	15·7	17·1	17·7	17·2	16·5	15·4	14·6	14·5	15·1	15·5
3†	14·5	14·2	13·5	13·5	14·4	15·8	16·6	17·0	16·5	16·0	15·5	14·5	13·9	14·4	15·0
4	14·2	13·5	12·8	13·1	14·5	15·8	17·1	17·7	17·7	17·0	16·0	15·1	14·7	14·8	14·9
5†	14·1	13·7	12·7	12·1	12·5	14·6	16·5	17·5	18·0	17·5	16·2	15·2	14·8	14·7	14·9
6†	14·5	13·4	11·8	11·1	12·0	14·3	15·9	16·9	17·6	17·6	16·6	15·3	14·7	14·9	15·0
7	14·0	13·6	12·6	12·1	13·1	14·3	16·0	17·0	17·6	17·0	16·0	14·6	13·9	14·2	14·8
8	13·7	13·1	12·2	12·5	13·9	15·6	16·8	17·6	17·5	16·5	15·8	15·0	14·6	14·6	14·9
9	13·3	13·1	12·5	12·5	13·4	14·9	16·6	16·8	17·1	16·1	14·6	14·1	13·9	13·7	12·6
10	13·9	13·7	12·9	13·1	13.9	14·9	15·7	16·8	16·7	15·6	14·5	13·7	13·2	14·1	14·2
11	14·1	14·0	13·6	13·0	14·2	15·7	16·1	16·1	15·9	15·7	14·9	14·2	13·9	13·9	14·3
12	14·3	13·9	12·8	11·7	12·1	13·4	14·5	15·3	15·5	15·4	14·8	14·1	13·7	13·7	14·0
13	14·2	13·9	13·3	12·6	13·7	15·9	17·5	18·1	18·3	16·9	15·1	14·0	13·1	13·2	13·7
14	14·1	13·6	12·7	12·8	13·6	14·2	14·7	15·5	15·8	14·9	14·1	13·2	12·9	14·0	14·1
15	14·2	13·8	12·9	12·8	13·3	14·1	15·5	16·8	16·8	15·9	14·5	13·6	13·2	12·9	13·7
16	13·7	13·1	11·9	11·9	13·7	15·7	16·5	16·9	17·0	16·2	14·7	14·1	14·1	14·7	14·9
17	14·2	13·8	12·7	12·4	13·5	14·9	15·9	17·3	17·2	16·1	14·7	13·6	13·6	14·1	14·6
18	14·2	13·5	12·5	12·1	12·9	14·2	16·6	18·1	18·2	17·1	15·5	13·9	13·5	14·0	14·6
19	14·4	14·0	13·4	13·0	13·7	14·8	15·7	16·6	16·7	15·9	15·1	14·1	13·9	14·5	15·0
20	14·9	14·5	13·7	13·7	14·1	14·7	15·5	16·9	17·4	16·5	15·5	14·7	14·5	14·7	15·0
21	14·9	14·7	13·5	12·8	13·8	15·3	16·4	16·9	16·9	16·4	15·5	14·4	14·7	14·8	14·7
22	15·3	15·1	14·2	13·4	14·4	15·5	16·7	17·1	17·5	16·7	15·6	15·0	14·6	14·6	14·7
23†	15·2	14·7	13·9	12·8	12·9	14·3	15·8	16·8	17·1	17·1	16·1	15·0	14·6	14·7	14·7
24†	15·1	15·0	13.6	12·6	13·2	14·8	16·5	17·8	17·8	16·9	15·8	15·1	14·9	14·9	14·7
25	15·2	14·7	13·7	13·1	13·8	15·6	17·3	18·5	18·4	17·3	16·1	15·1	14·6	14·5	14·7
26	14·6	14·5	13.7	12·8	13·3	14·3	15·6	16·9	17·5	16·9	15·8	15·0	14·9	15·2	15·3
27	15·0	15·0	13·8	13·3	13·3	13·9	15·7	16·7	16·8	16·7	15·8	15·0	14·6	14·8	15·2
28	14·6	15·9	12·5	11·7	11·9	13·2	15·3	16·7	16·9	16·8	16·4	16·0	15·6	15·4	15·3
29	15·4	14·9	14·1	13·1	13·0	13·4	14·8	16·1	16·3	15·7	15·3	15·3	15·5	15·3	15·4
30	15·2	15·0	14.3	13·5	13·7	14·6	15·3	16·3	16·3	15·8	15·1	14·7	15·0	15·5	15·5
Mean .	14·5	14·0	1 ·1	12·7	13·5	14·8	16·1	17·0	17·1	16·4	15·4	14·5	14·3	14·5	14·7
Mean† .	14·6	14·2	13·0	12·3	12.9	14·7	16·	17·2	17·4	17·0	16·0	15·0	14·6	14·7	14·9

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1†	15·3	14·8	13·7	13·5	13·8	14·8	15·4	16·1	16·3	15·7	14·9	14·8	15·1	15·6	15·5
2	15·1	15·2	14·7	14·4	14·2	14·5	15·5	16·6	16·9	16·8	15·9	15·4	15·4	15·5	15·3
3	15·1	15·1	14·5	13·9	13·5	14·1	15·1	16·7	17·5	16·5	15·7	14·7	14·7	15·1	15·4
4	15·2	15·1	14·6	14·0	14·0	14·2	15·1	16·0	16·5	16·2	15·7	14·7	14·5	15·1	15·3
5	15·1	15·3	14·6	14·2	14·4	14·7	15·5	16·2	16·1	15·8	15·3	14·1	14·0	14·8	14·8
6	14·9	15·2	14·6	14·1	14·4	14·9	15·7	16·6	16·7	15·2	14·4	14·4	13·7	14·4	14·8
7	15·2	15·0	14·9	14·8	14·5	15·3	16·1	16·3	16·6	16·0	15·1	14·3	14·6	14·7	14·9
8	15·1	15·0	14·2	13·7	13·4	13·9	14·9	15·7	15·7	15·4	14·5	14·4	14·7	14·7	14·7
9	15·2	15·2	14·4	13·5	14·1	15·3	16·8	17·5	17·1	16·0	15·3	14·6	14·6	14·6	14·7
10	15·4	15·2	14·8	13·8	13·8	14·2	15·0	15·7	16·3	15·9	15·1	14·8	15·3	14·8	14·8
11	15·2	15·0	14·6	13·7	13·3	13·3	14·1	15·0	15·3	15·2	14·7	13·8	13·9	14·1	14·3
12	15·3	15·2	14·5	13·8	13·8	14·3	15·2	15·6	15·7	15·4	14·6	13·9	13·4	13·8	14·5
13	14·9	14·9	14·4	13·6	13·9	14·7	16·0	16·7	15·9	15·0	14·3	13·9	13·7	14·3	14·5
14	15·4	14·8	14·4	13·5	13·5	13·9	14·7	14·7	14·3	13·7	13·5	12·5	13·6	14·6	14·7
15	14·7	14·7	14·5	14·3	14·6	14·9	15·3	15·7	15·3	14·4	13·9	14·0	14·6	14·8	15·1
16†	14·8	14·8	14·7	14·4	15·4	16·4	16·7	16·1	15·6	14·9	14·8	14·6	14·6	14·9	14 9
17	15·1	15·2	14·7	14·0	14·6	15·1	15·3	15·7	15·2	14·6	14·5	14·6	14·7	15 0	15·1
18	15·8	15·6	15·0	14·7	14·8	15·1	15·1	14·7	13·9	13·5	13·5	13·7	14·4	14·2	14·1
19	14·7	14·9	14·7	14·1	14·5	15·0	15·5	15·7	15·5	14·9	14·2	13·9	14·6	14·9	14·9
20	14·8	14·7	14·2	14·6	15·5	15·8	16·5	16·9	16·6	15·9	15·2	14·8	14·9	15·3	15·3
21†	15·0	15·1	15·0	14·6	14·6	15·4	16·9	17·1	16·6	15·7	14·8	14·5	14·7	15·1	15·0
22	15·0	14·8	14·5	14·1	14·1	14·7	15·8	16·7	16·3	15·4	15·0	14·6	14·8	15·2	15·2
23	15·0	15·2	15·4	14·6	14·9	15·7	16·3	16·5	15·8	15·4	15·0	14·8	14·9	15·1	15·0
24	15·3	15·2	14·9	14·9	14·7	15·9	16·7	16·9	16·2	15·5	15·4	15·2	15·3	15·2	15·2
25	14·6	15·1	14·9	14·7	14·7	15·0	15·3	15·0	15·2	14·2	14·6	14·6	14·8	14·9	15·0
26	14·9	15·3	15·2	15·1	15·1	15·3	15·7	15·7	16·0	15·9	15·5	14·9	14·9	14·9	15·0
27	15·0	15·4	14·7	14·4	14·1	14·7	15·2	15·6	15·5	15·3	15·2	15·1	15·1	15·1	15·1
28†	15·2	15·2	14·7	14·7	15·0	15·4	15·7	15·4	15·4	15·2	14·7	14·1	14·3	14·9	14·9
29†	15·2	15·3	14·7	14·5	15·1	15·9	16·6	16·6	15·9	15·3	14·9	14·9	15·4	15·3	15·2
30	15·1	15·1	14·4	14·1	14·8	15·3	15·6	15·7	15·7	15·4	14·8	14·6	14 8	15·1	15·1
31	15·3	15·3	15·2	15·1	15·3	15·6	16·3	15·9	15·5	15·3	15·3	15·1	15·4	15·8	15 6
Mean	15·1	15·1	14·7	14·2	14·4	14·9	15·7	16·0	15·9	15·3	14·8	14·5	14·6	14·9	14·9
Mean† .	15·1	15·1	14·6	14·3	14·8	15·6	16·3	16·3	16·0	15·4	14·8	14·5	14·8	15·2	15·1

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Hours (G.M.T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
15·1	14·9	14·8	14·8	14·8	14·8	14·9	14·7	14·5	15·0	2 20	12·6	6 38	18·2	1
15·6	15·4	15·1	15·0	14·9	14·9	14·8	14·6	14·7	14·9	2 22	11·3	6 44	17·8	2
15·1	15·0	14·9	14·9	14·8	14·7	14·6	14·4	14·2	14·9	2 24	13·1	6 50	17·0	3†
15·0	15·0	15·0	14·9	14·7	14·7	14·6	14·3	14·2	15·1	2 6	12·6	7 30	17·9	4
15·0	15·0	14·9	14·8	14·7	14·6	14·6	14·6	14·4	14·9	3 10	11·9	7 40	18·0	5†
15·1	15·1	15·1	14·9	14·8	14·7	14·5	14·5	14·2	14·8	2 56	11·0	7 58	17·7	6†
14·9	14·9	14·9	14·9	14·9	14·7	14·5	14·3	14·2	14·7	2 38	12·0	8 4	17·6	7
15·0	14·9	14·8	14·7	14·6	14·5	14·2	13·7	13·5	14·8	2 22	11·9	7 30	17·8	8
13·4	13·6	13·6	13·8	14·0	13·9	14·4	14·3	14·0	14·2	2 30	12·1	8 22	18·0	9
14·3	14·6	14·5	14·5	14·4	14·1	14·0	14·0	13·9	14·4	2 12	12·8	7 20	17·0	10
14·5	14·1	14·1	14·2	14·0	14·0	14·0	14·2	14·4	14·5	3 0	12·9	6 30	16·4	11
14·3	14·5	14·4	14·6	14·6	14·5	14·5	14·4	14·3	14·1	2 56	11·6	8 20	15·6	12
12·7	13·1	13·7	13·8	14·1	14·8	13·7	13·8	13·9	14·5	15 6	12·0	7 30	18·7	13
14·5	14·6	14·6	14·6	13·8	14·7	13·9	14·3	14·2	14·1	2 20	12·3	7 40	15·9	14
14·5	14·5	14·5	14·6	14·2	13·9	13·9	14·1	14·1	14·3	1 58	12·7	7 46	16·9	15
14·8	14·8	14·8	14·8	14·8	14·7	14·8	14·6	14·2	14·6	2 18	11·7	7 48	17·3	16
14·8	15·0	15·0	15·0	14·8	14·6	14·0	14·0	14·1	14·6	2 44	12·1	7 10	17·6	17
14·8	14·9	14·8	14·8	14·8	14·7	14·7	14·6	14·5	14·7	2 54	11·9	7 40	18·7	18
14·8	14·6	14·6	14·5	14·4	14·5	14·5	14·6	14·6	14·7	3 8	12·9	7 30	16·8	19
15·0	14·9	14·7	14·7	14·7	14·7	14·7	14·9	14·9	15·0	2 10	13·5	7 50	17·6	20
14·8	14·9	14·8	14·7	14·7	14·9	15·1	15·1	15·0	15·0	2 50	12·7	7 0	17·1	21
14·6	14·7	14·8	14·9	14·9	14·9	14·9	15·0	15·1	15·2	2 46	13·1	7 50	17·5	22
14·7	14·8	14·7	14·7	14·7	14·7	14·7	14·8	15·2	14·9	3 10	12·6	8 10	17·3	23†
14·7	14·6	14·9	14·9	14·8	15·0	15·0	15·0	15·2	15·1	3 10	12·6	7 6	17·8	24†
15·1	14·7	14·5	13·7	14·0	13·9	13·9	13·9	13·8	15·0	2 58	13·0	7 10	18·6	25
15·3	15·2	15·5	14·9	14·9	15·0	15·0	15·1	14·8	15·1	3 0	12·7	8 0	17·5	26
15·3	15·2	15·0	14·9	14·7	14·9	14·8	14·8	14·8	15·0	3 28	12·9	6 58	17·0	27
15·3	15·1	15·1	15·3	15·1	15·1	15·1	15·0	15·4	15·0	3 0	11·7	8 4	17·1	28
15·5	15·4	15·3	14·8	14·8	14·8	14·8	14·9	15·0	14·9	3 49	12·8	7 30	16·5	29
15·5	15·4	15·3	15·2	15·0	15·1	14·8	14·9	15·2	15·1	3 12	13·3	7 30	16·7	30
14·8	14·8	14·7	14·7	14·6	14·6	14·5	14·5	14·5	14·8					Mean.
14·9	14·9	14·9	14·9	14·8	14·8	14·7	14·7	14·7	14·9					Mean†

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15·3	15·2	15·2	15·0	14·9	14·9	14·8	15·0	15·1	15·0	2 50	13·4	7 30	16·6	1†
15·3	15·3	15·3	15·2	15·0	14·8	14·7	14·7	14·9	15·3	3 46	13·9	7 52	17·1	2
15·3	15·2	15·2	15·2	14·9	14·9	14·9	15·0	15·1	15·1	4 0	13·5	7 52	17·6	3
15·3	14·9	15·0	14·7	14·7	14·7	14·7	14·9	15·2	15·0	3 18	13·9	7 30	16·7	4
14·9	14·9	14·7	14·7	14·7	14·7	15·0	15·0	14·9	14·9	11 10	13·4	7 10	16·6	5
14·8	14·7	14·8	14·7	14·7	14·7	14·7	14·8	15·0	14·9	12 20	13·4	7 30	16·8	6
14·8	14·6	14·3	13·8	14·2	14·6	15·1	15·3	15·2	15·0	11 20	12·9	7 30	16·8	7
14·8	14·8	14·8	14·7	14·7	14·7	15·0	15·2	15·3	14·7	3 44	13·3	7 10	15·7	8
14·7	14·7	14·7	14·4	14·7	14·7	14·6	14·8	15·6	15·1	3 26	13·5	6 30	17·7	9
14·7	14·7	14·1	13·9	14·3	15·0	14·7	15·0	15·1	14·8	3 20	13·5	8 30	16·5	10
14·3	14·5	14·8	14·7	14·7	14·7	14·7	14·8	15·3	14·5	4 24	13·1	23 16	15·8	11
14·6	14·6	14·6	14·6	14·6	14·6	14·7	15·0	14·9	14 6	12 24	13·3	7 30	15·7	12
13·9	14·9	15·1	15·0	14·8	14·7	14·7	14·9	15·0	14·7	2 56	13·4	6 50	16·8	13
14·9	14·8	14·6	14·7	14·6	14·5	14·6	14·6	14·7	14·3	10 54	12·2	0 0	15·7	14
15·0	14·7	14·5	14·7	14·7	14·8	14·7	14·7	14·8	14·7	10 8	13·8	6 40	15·9	15
14·8	14·7	14·6	14·6	14·6	14·7	14·7	14·8	15·0	15·0	3 0	14·4	5 30	16·7	16†
15·0	14·8	14·8	14·8	14·7	14·9	14·9	15·3	15·5	14·9	2 44	14·0	7 0	15·7	17
14·2	14·4	14·7	14·6	14·5	14·6	14·6	14·5	14·6	14·5	9 54	13·2	0 10	16·2	18
14·9	14·7	14·7	14·7	14·7	14·7	14·7	14·9	14·8	14·8	11 0	13·8	6 30	15·7	19
15·3	14·8	14·7	14·7	14·6	14·6	14·5	14·4	14·9	15·1	2 10	14·1	6 50	17·0	20
14·9	14·8	14·8	14·7	14·7	14·7	14·8	14·9	14·9	15·1	10 54	14·4	6 30	17·5	21†
15·1	15·0	15·1	14·9	15·0	14·8	14·8	14·8	14·7	15·0	3 30	13·9	7 10	16·9	22
15·0	15·1	15·2	15·1	15·1	15·1	15·1	15·4	15·2	15·3	3 10	14·5	6 30	16·5	23
15·3	14·7	14·9	14·9	14·7	14·7	14·7	14·8	14·8	15·2	15 6	14·4	6 10	16·9	24
14·9	14·7	14·6	14.7	14·7	14·7	14·6	14·6	15·0	14·8	9 14	14·2	6 0	15·4	25
15·0	14·9	14·9	14·9	14·8	14·8	14·7	14·8	14·9	15·1	21 4	14·5	6 14	16·1	26
15·0	15·0	15·0	15·1	15·1	14·9	14·9	15·0	15·1	15·0	3 30	14·1	6 53	15·6	27
14·9	15·0	15·0	14·9	14·9	14·8	14·8	14·9	15·1	14·9	11 14	14·0	6 2	15·7	28†
15·1	14·9	14·9	14·9	14·9	14·7	14·9	14·9	15·2	15·2	2 52	14·4	6 20	16·7	29†
14·9	15·0	14·8	14·7	14·6	14·7	14·7	14·8	15·1	15·0	2 50	14·1	6 40	15·8	30
15·4	15·3	15·0	14·9	14·8	14·7	14·6	14·8	14·8	15·3	19 30	14·6	6 10	16·4	31
14·9	14·9	14·8	14·7	14·7	14·7	14·8	14·9	15·0	14·9					Mean.
15·0	14·9	14·9	14·8	14·8	14·8	14·8	14·9	15·0	15·1					Mean.†

* See footnote on page B-5.

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	14·8	14·8	14·7	14·6	14·8	15·6	16·7	16·7	15·8	15·4	14·6	14·2	14·5	14·5	14·6
2	15·2	15·1	14·7	14·5	14·4	14·8	15·8	15·7	15·1	14·6	14·5	14·2	14·7	15·0	14·9
3	15·3	15·1	15·0	14·9	15·3	15·7	16·3	16·4	15·8	15·4	15·1	15·3	15·3	15·1	15·1
4	16·5	15·5	14·9	14·2	13·7	14·1	14·8	14·9	14·4	14·0	14·5	14·9	15·0	14·7	14·5
5	15·3	15·3	15·0	14·5	14·5	14·5	14·9	15·1	14·9	14·9	14·8	14·6	14·7	14·6	14·8
6	15·5	15·6	15·7	15·5	15·4	15·8	15·9	15·0	14·4	14·5	14·9	14·7	14·7	14·7	14·2
7	15·5	15·6	15·5	14·7	14·4	14·9	15·3	15·1	14·3	13·8	13·9	13·2	13·6	14·5	14·2
8	15·2	15·5	14·8	14·8	14·7	14·4	14·8	14·3	13·3	12·7	13·3	14·2	14·8	14·7	13·4
9	15·0	15·0	15·0	14·5	14·6	14·8	15·4	15·1	15·0	14·6	14·6	14·7	14·0	14·3	14·3
10	15·2	15·2	14·7	14·2	14·3	14·7	15·2	15·3	14·7	14·6	15·1	15·0	14·1	13·7	13·8
11	15·4	15·4	15·5	14·9	14·8	15·5	16·5	16·8	16·2	14·9	14·6	14·8	14·4	13·8	14·5
12	15·5	15·2	15·1	14·9	14·5	14·7	15·1	14·8	14·1	13·9	14·5	14·5	14·6	14·6	14·6
13	15·3	15·2	15·2	14·8	14·8	14·9	15·5	15·5	14·9	14·2	14·5	14·5	14·7	14·9	15·0
14†	15·5	15·3	15·4	15·2	15·5	15·5	15·5	15·3	15·0	14·9	15·1	15·0	14·9	15·1	15·0
15†	15·3	15·5	15·3	14·5	14·2	14·4	15·3	15·1	14·5	14·1	14·2	14·4	14·5	14·9	14·8
16	15·4	15·4	15·1	14·2	13·3	13·3	13·7	13·7	13·8	14·1	14·1	14·3	14·6	14·7	14·7
17†	15·1	15·2	15·5	14·9	14·4	14·6	15·3	15·2	14·9	14·6	14·6	14·5	14·6	14·7	14·7
18	15·5	15·5	15·5	15·4	14·7	15·3	15·6	15·5	15·0	14·7	14·5	14·5	14·5	14·7	14·7
19	15·5	15·5	15·9	15·3	14·8	15·1	15·5	15·4	14·8	14·5	14·6	14·6	14·9	14·9	14·9
20	15·0	15·2	16·1	15·7	14·5	13·6	13·9	14·1	13·6	13·4	13·8	14·0	14·4	14·6	14·7
21	14·9	15·4	15·3	15·1	14·5	15·4	16·4	16·4	15·8	15·5	15·4	14·8	14·4	14·5	14·6
22	15·4	15·4	15·8	15·6	15·0	15·2	15·1	15·3	15·0	15·2	14·8	14·5	14·6	14·8	14·8
23	15·1	15·3	15·5	15·4	14·9	15·4	16·7	17·0	16·1	15·0	14·6	14·7	14·8	14·7	14·8
24†	15·3	15·4	15·6	15·4	15·0	15·0	15·7	15·5	14·8	14·5	14·4	14·4	14·4	14·5	14·6
25	15·0	15·4	15·4	15·1	15·0	15·0	15·3	15·4	15·3	15·1	14·7	14·4	14·4	14·6	14·9
26†	15·3	15·5	15·9	15·9	15·5	15·4	15·4	15·6	15·4	15·3	14·8	14·7	14·6	14·8	14·9
27	15·1	15·1	15·1	15·1	15·0	15·0	15·5	15·8	15·4	15·0	14·6	14·5	14·6	14·8	14·9
28	15·4	15·3	15·5	15·6	15·1	14·9	14·9	14·6	13·8	13·3	12·9	13·3	14·1	14·4	14·1
29	15·3	15·4	16·0	15·5	15·1	14·9	14·6	14·3	14·0	14·0	14·2	14·4	14·5	14·6	14·7
30	16·1	16·3	16·4	16·4	15·9	15·7	16·4	16·5	15·6	14·7	14·4	14·4	14·5	14·6	14·8
Mean .	15·3	15·3	15·4	15·1	14·7	14·9	**15·4**	15·4	14·9	14·5	**14·5**	14·5	14·5	14·6	14·6
Mean† .	15·3	15·4	**15·5**	15·2	14·9	14·9	15·5	15·4	14·9	14·7	14·6	**14·6**	14·6	14·8	14·8

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1†	15·5	15·4	15·3	14·9	14·4	14·8	15·5	15·5	14·9	14·4	14·4	14·4	14·5	14·6	14·9
2	15·5	15·9	16·2	15·7	15·0	15·1	15·4	15·3	14·7	14·0	13·7	13·9	14·5	14·8	15·0
3	16·1	16·1	16·3	15·9	15·5	15·8	16·1	15·9	14·9	14·3	13·9	14·3	13·6	14·4	14·7
4	15·6	16·1	16·5	16·4	15·5	15·3	15·4	15·2	14·4	13·6	13·4	13·6	12·6	14·0	14·3
5	15·7	16·1	16·4	16·4	15·9	16·2	16·4	16·2	15·4	14·4	14·2	13·4	13·6	14·0	13·6
6	15·7	15·9	16·1	15·2	14·6	14·6	15·2	15·3	14·9	13·8	13·5	13·6	14·0	13·8	14·3
7	15·4	15·5	15·2	14·5	14·3	14·6	15·3	15·3	14·9	14·3	14·3	14·0	14·3	13·7	13·5
8	15·4	15·4	15·3	14·7	14·2	14·2	15·1	15·9	15·6	15·4	15·3	15·1	14·6	14·3	14·5
9	15·3	15·4	15·2	15·0	14·8	14·9	15·3	15·4	15·1	14·8	14·6	14·2	13·8	14·3	14·6
10	15·7	16·0	15·7	15·3	15·0	15·1	15·5	16·1	15·8	15·3	14·7	13·9	13·6	14·5	15·0
11	15·9	15·7	16·0	15·7	15·5	15·1	15·0	15·5	15·5	15·3	15·0	14·7	14·5	14·7	14·8
12	15·1	15·1	15·5	15·3	14·9	14·8	15·3	15·4	14·7	14·4	14·4	14·4	14·6	14·8	15·0
13	16·0	15·9	16·2	15·9	15·7	15·7	16·3	16·1	15·2	14·7	14·8	14·9	14·9	14·8	14·9
14†	15·6	15·7	15·7	15·4	14·8	14·7	14·6	14·4	14·1	13·5	14·3	14·5	14·5	14·7	14·7
15†	15·7	15·8	16·2	16·3	15·8	15·8	16·1	15·9	15·2	14·9	14·5	14·4	14·8	15·3	15·3
16	15·9	16·1	16·3	16·2	15·6	15·5	16·0	15·6	15·4	14·9	14·4	14·3	14·8	15·1	15·2
17	15·4	15·8	15·9	15·7	15·2	15·1	15·6	15·5	14·7	14·4	14·5	14·5	15·2	15·2	15·1
18	15·3	15·5	16·0	16·4	15·8	15·4	15·1	15·2	14·4	14·5	14·5	14·9	15·1	14·8	14·7
19	15·4	15·9	16·2	15·9	15·4	15·2	15·6	16·3	15·6	15·0	14·5	14·3	14·5	15·0	15·1
20	15·6	15·7	15·5	15·1	14·4	15·1	16·4	16·9	16·6	15·9	15·1	14·7	14·5	14·6	14·8
21	15·4	15·4	15·3	14·8	14·3	14·6	15·5	15·5	15·0	14·9	15·0	14·8	14·8	14·9	15·1
22	15·7	15·8	15·9	15·4	14·5	14·4	15·0	15·8	15·7	15·5	15·6	14·9	14·6	14·9	15·0
23	15·5	15·6	15·7	15·2	14·5	14·8	15·7	16·5	16·8	16·5	15·7	14·9	14·6	14·7	14·8
24†	15·5	15·5	15·5	15·4	14·3	13·5	14·2	16·1	16·5	16·3	15·8	15·2	14·9	14·9	14·9
25	15·8	15·7	15·5	14·7	14·1	14·3	15·0	15·6	15·8	16·3	15·9	14·8	14·7	15·1	15·1
26	16·0	16·2	16·4	16·4	15·4	14·7	15·1	16·4	17·0	16·8	16·0	15·0	14·7	15·0	15·0
27	15·9	15·7	15·6	15·3	14·1	13·2	13·2	14·5	16·3	16·7	16·1	15·2	14·7	15·0	15·1
28	15·7	15·6	15·6	15·6	14·9	14·9	14·9	15·1	15·6	16·0	15·7	15·1	14·6	14·7	14·7
29	16·2	16·2	16·4	15·9	14·8	14·4	14·8	14·5	14·2	15·6	16·2	15·3	15·0	15·1	15·1
30†	15·6	16·0	16·2	16·1	15·1	14·4	15·9	**16·9**	16·5	16·0	15·6	14·7	15·0	15·3	15·3
31	15·8	16·0	16·6	16·6	15·8	15·5	15·9	16·6	16·4	16·2	15·6	15·1	15·2	15·3	15·1
Mean .	15·7	15·8	**15·9**	15·6	15·0	14·9	15·4	15·7	15·4	**15·1**	14·9	14·5	**14·5**	14·7	14·8
Mean† .	15·7	15·8	**15·9**	15·7	14·9	14·7	15·3	15·8	15·5	15·0	14·9	**14·6**	14·7	15·0	15·0

† Five international quiet days.

(Average for period of sixty minutes centred at the full hour of Greenwhich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Maximum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
14·7	14·9	14·8	14·6	14·6	14·7	14·8	14·9	15·0	15·0	10 52	14·1	6 16	16·9	1
15·1	15·1	14·7	14·4	14·6	14·9	14·8	14·9	15·1	14·9	10 40	13·7	6 10	16·1	2
15·1	14·6	14·8	14·8	15·1	14·8	15·3	15·3	15·3	15·3	15 50	14·6	6 30	16·6	3
14·0	14·6	14·6	14·4	14·6	14·7	15·0	14·9	15·5	14·7	3 41	13·7	22 40	15·7	4
14·9	15·0	15·2	15·1	14·9	14·9	14·8	15·0	15·5	14·9	3 24	14·3	22 52	15·7	5
14·3	14·6	14·2	14·3	14·5	14·5	14·8	15·0	15·2	14·9	17 24	13·3	5 20	16·3	6
14·3	14·3	14·5	14·5	14·4	14·7	15·7	14·7	15·0	14·6	11 16	12·5	20 44	16·3	7
14·1	14·5	14·5	14·4	14·6	14·9	15·5	15·2	14·7	14·5	8 56	**12·5**	20 52	15·7	8
14·3	14·8	14·7	14·9	15·0	15·0	15·5	15·0	15·0	14·8	11 50	13·8	21 4	15·7	9
14·1	14·5	14·5	14·5	14·7	14·7	14·8	14·9	15·3	14·7	12 56	13·5	23 32	15·6	10
14·7	14·8	14·5	14·5	14·4	14·5	14·9	15·1	15·2	15·0	12 40	13·5	6 50	16·9	11
14·5	14·6	14·5	14·6	14·8	14·7	14·9	14·8	15·0	14·7	8 20	13·8	0 16	15·5	12
15·1	15·1	15·0	15·0	15·0	15·0	15·0	15·2	15·5	15·0	9 20	14·1	6 0	15·7	13
14·9	14·7	14·6	14·6	14·6	14·6	14·8	15·0	15·1	15·1	19 0	14·5	6 0	15·7	14†
14·7	14·6	14·6	14·6	14·7	14·7	15·0	15·1	15·3	14·8	9 16	14·0	1 34	15·6	15†
14·7	14·8	14·7	14·6	14·6	14·6	14·7	14·8	15·1	**14·4**	4 24	13.1	0 0	15·5	16
14·7	14·7	14·7	14·5	14·4	14·4	14·5	14·6	14·9	14·8	3 50	14·3	1 48	15·7	17†
14·7	14·9	14·6	14·3	14·2	14·5	14·7	15·0	15·2	14·9	19 20	14·1	1 30	15·9	18
14·9	14·9	14·8	14·6	14·5	14·3	14·5	14·6	14·8	14·9	19 6	12·2	1 54	16·0	19
14·7	14·8	14·8	14·7	14·8	14·5	14·5	14·3	14·8	14·5	8 40	13·3	2 10	16·3	20
14·6	14·7	14·9	14·7	14·9	14·6	15·0	15·1	15·3	15·1	11 36	14·4	5 50	16·5	21
14·8	14·9	14·6	14·5	14·6	14·6	14·7	14·9	14·9	15·0	11 20	14·4	2 10	16·1	22
14·8	14·9	15·0	14·8	14·5	14·4	14·5	14·9	15·0	15·1	19 10	14·3	6 30	**17·3**	23
14·6	14·9	14·9	14·8	14·5	14·5	14·7	14·8	15·0	14·9	10 10	14·4	5 48	15·9	24†
14·8	14·8	15·0	15·1	15·2	15·0	15·0	15·0	15·2	15·0	11 14	14·4	6 38	14·5	25
14·8	14·9	14·9	14·9	14·9	14·9	15·0	14·9	15·1	15·1	11 30	14·4	2 2	16·0	26†
15·0	15·1	15·1	14·6	14·5	14·8	15·1	14·6	15·0	15·0	18 20	14·4	6 34	16·0	27
14·4	14·9	14·6	14·5	14·4	14·4	14·5	14·9	15·1	14·5	10 8	12·6	2 24	15·8	28
14·9	14·8	14·8	14·8	15·0	15·0	15·2	15·3	15·6	14·9	8 56	13·8	2 2	16·2	29
14·9	14·9	14·9	14·9	14·9	14·9	14·8	15·0	15·3	**15·3**	9 36	14·3	6 20	16·6	30
14·7	14·8	14·7	14·7	14·7	14·7	14·9	14·9	15·1	14·9					Mean.
14·8	14·8	14·7	14·7	14·6	14·6	14·8	14·9	15·1	14·9					Mean.†

DECEMBER.

15·1	15·1	15.1	15·1	15·1	15·1	15·1	15·3	15·5	15·0	9 0	14·3	0 0	15·6	1†
15·1	15·2	15·2	14·9	14·9	14·9	15·2	15·7	15·9	15·1	10 2	13·5	1 50	16·2	2
14·8	14·8	14·9	14·9	14·7	14·7	14·7	15·1	15·4	15·1	12 16	13·2	1 30	16·4	3
14·5	14·4	14·4	14·4	14·1	14·4	14·8	15·0	15·4	14·7	12 0	**12·4**	1 36	16·6	4
13·6	14·4	13·7	13·7	14·5	14·9	15·3	15·3	15·5	14·9	14 50	13·0	2 32	16·7	5
14·3	14·3	14·7	14·6	14·9	14·9	15·2	15·4	15·4	14·7	10 30	13·5	1 42	16·5	6
14·8	14·9	14·9	15·0	14·7	14·7	14·8	15·3	15·4	14·7	13 22	12·7	0 52	15.7	7
14·4	14·8	14·8	14·9	15·0	15·1	15·1	15·2	15·3	15·0	4 10	14·1	7 10	16·1	8
13·4	13·4	13·6	13·5	14·3	14·3	14·7	15·5	15·1	**14·6**	14 40	13·3	22 6	16·2	9
15·0	14·6	14·4	13·9	14·4	14·4	14·8	15·4	15·7	15·0	11 38	13·2	0 22	16·3	10
15·0	14·9	14·9	14·8	14·9	14·7	14·6	14·8	14·9	15·1	11 52	14·5	2 2	16·3	11
15·1	15·2	15·1	14·8	14·8	15·2	15·3	15·7	16·0	15·1	8 40	14·4	23 22	16·3	12
14.8	14·8	15·0	14·8	14·8	15·1	15·3	15·3	15·5	15·3	9 30	14·6	6 0	16·4	13
14·8	14·8	15·0	14·9	15·0	15·1	15·3	15·3	15.7	14·9	9 0	13·5	1 30	16·0	14†
15·3	15·3	15·4	15·3	15·3	15·3	15·5	15·5	15·7	15·5	10 10	14·4	2 20	16·4	15†
15·1	15·2	15·1	14·9	14·8	14·7	15·0	15·3	15·4	15·3	10 24	14·3	2 20	16·4	16
15·1	15·1	15·0	14·9	14·8	14·6	14·8	14·8	15·1	15·1	9 24	14·3	1 24	16·1	17
14·9	15·0	15·0	14·8	14·7	14·8	14·7	14·7	15·1	15·1	8 12	14·1	2 56	16·5	18
14·9	15·1	15·3	15·2	15·2	15·3	15·3	15·4	15·4	15·3	10 30	14·3	2 10	16·4	29
14·9	15·1	15·3	15·3	15·3	15·1	15·1	15·2	15·3	15·3	4 0	14·2	6 30	16·9	20
15·1	15·3	15·3	15·3	15·2	15·1	15·2	15·2	15·5	15·1	4 0	14·2	6 30	15·9	21
15·1	15·3	15·2	15·2	15·2	15·2	15·1	15·3	15·3	15·2	4 14	14·4	7 6	16·1	22
15·0	15·1	15·0	15·1	14·9	14·9	15·0	15·1	15·4	15·3	11 46	14·4	7 40	17·0	23
15·1	14·9	15·0	15.1	15·0	15·2	15·4	15·5	15·7	15·2	5 10	13·4	7 30	16·5	24†
15·0	15·1	15·0	15·1	15·3	15·5	15·5	15·5	16·1	15·3	3 54	13·9	9 10	16·3	25
15·0	15·1	15·1	15·1	15·2	15·3	15·5	15·5	15·5	15·6	5 18	14·6	8 10	**17·1**	26
15·3	15·3	15·0	14·9	14·8	15·1	15·4	15·5	15·7	15·1	5 28	12·6	8 58	16·9	27
14·8	15·0	15·0	15·0	15·1	15·0	15·0	15·5	15·4	15·2	13 30	14·5	23 42	16·7	28
15·1	15·2	15·2	15·2	15·1	15·1	15·1	15·2	15·5	15·3	7 50	14·0	2 10	16·6	29
15·3	15·3	15·2	15·2	15·3	15·3	15·4	15·4	15·7	15·5	5 10	14·3	6 30	17·1	30†
15·2	15·2	15·3	15·4	15·6	15·6	15·6	15·9	16·0	**15·7**	11 12	14·9	2 24	16·9	31
14·9	14·9	14·9	14·9	14·9	15·0	15·1	15·3	15·5	15·1					Mean.
15·1	15·0	15.1	15·1	15·1	15·2	15·3	15·3	15·6	15·2					Mean.†

†See footnote on page B-5.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JANUARY. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	391	391	386	388	395	402	415	420	420	418	410	395	390	389	383
2	377	377	376	383	383	395	402	408	401	391	394	381	380	380	381
3	378	378	380	381	380	384	393	395	391	393	395	391	391	385	385
4†	381	388	386	386	381	381	391	398	397	389	388	387	389	389	385
5†	383	384	392	399	399	406	415	416	407	401	395	395	396	395	391
6	394	395	398	406	410	416	425	411	409	398	371	358	350	338	344
7	378	380	385	391	396	406	407	401	397	386	385	381	378	371	371
8	382	383	389	396	396	409	417	419	406	394	389	386	378	377	377
9	393	393	397	404	410	415	419	419	407	401	397	392	391	387	390
10†	386	389	393	398	407	416	420	415	402	389	385	384	384	382	382
11†	388	389	395	403	412	420	424	418	413	404	393	390	387	382	381
12	391	394	396	403	411	418	424	423	423	419	411	400	398	399	401
13	396	400	403	413	424	431	438	438	434	427	414	405	400	397	396
14	397	396	397	400	406	412	417	422	417	412	408	404	400	398	398
15	378	387	393	403	405	398	387	376	344	316	336	346	352	354	353
16	370	372	371	372	383	396	397	395	383	367	367	369	365	364	368
17	381	381	382	385	388	393	397	397	389	370	368	376	376	374	379
18	382	383	386	391	400	403	408	414	409	399	389	386	382	380	381
19	389	393	397	401	410	424	423	416	412	411	401	397	393	376	351
20	377	378	387	397	399	389	396	390	382	381	380	376	374	373	369
21†	386	389	393	400	407	409	414	416	411	407	403	397	398	392	386
22	391	392	393	400	410	429	440	425	409	401	397	391	384	383	388
23	359	362	364	367	373	374	367	365	369	369	370	369	372	373	357
24	378	373	381	381	390	401	401	390	387	387	384	375	361	368	370
25	375	375	377	381	378	388	396	407	391	384	383	379	375	373	366
26	380	377	384	401	402	409	418	409	404	394	392	391	392	384	375
27	379	388	396	392	389	385	394	391	384	378	369	369	373	382	384
28	376	385	392	395	407	416	416	413	403	379	373	368	375	378	384
29	380	381	380	382	387	394	401	401	399	397	388	382	377	366	364
30	382	385	386	390	406	417	422	422	413	404	394	386	382	377	376
31	377	377	382	390	393	400	410	407	408	408	399	391	385	375	372
Mean . .	383	384	388	393	398	404	409	408	401	393	388	384	381	379	377
Mean†. .	387	390	394	399	403	408	414	414	407	399	393	391	391	388	385

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1	382	384	387	396	406	412	417	419	418	415	405	396	393	389	387
2	392	393	401	410	409	415	419	418	410	396	394	393	390	387	387
3	388	388	391	396	399	404	411	410	405	399	395	391	389	383	379
4	401	402	401	404	408	414	419	424	420	409	399	399	395	392	393
5	395	396	399	401	406	405	403	397	396	395	391	394	398	401	400
6†	401	402	404	412	419	428	434	431	422	414	409	405	401	396	392
7	408	414	417	424	421	426	431	430	427	416	403	406	406	402	397
8	398	401	405	410	415	411	414	420	408	397	394	395	399	401	399
9	398	402	405	408	409	406	401	393	386	381	384	391	391	387	383
10	391	393	398	404	412	416	413	410	405	401	402	403	403	398	393
11†	394	399	402	411	418	421	423	421	421	416	413	411	410	408	409
12	402	406	416	422	431	440	439	435	423	414	406	405	401	398	393
13†	397	397	399	406	417	425	428	429	423	413	405	400	399	398	396
14	400	403	406	410	419	434	443	442	431	421	410	396	390	386	390
15	398	400	404	410	416	419	429	434	428	410	405	393	380	381	388
16†	395	394	398	404	407	409	414	420	417	409	403	398	398	397	395
17†	394	395	394	396	403	413	420	425	422	419	410	405	402	400	400
18	410	414	415	416	419	424	426	428	428	426	424	419	418	414	412
19	397	400	401	415	417	429	437	441	437	440	438	403	368	347	329
20	398	382	388	365	369	377	387	392	387	373	356	369	366	353	370
21	385	385	384	380	382	387	387	394	391	388	384	378	365	362	343
22	381	397	396	385	386	382	385	387	389	377	379	375	376	375	381
23	378	377	379	380	394	412	421	410	395	396	389	384	382	381	365
24	385	374	381	381	385	395	405	397	389	378	369	356	341	355	339
25	375	374	374	375	381	395	401	400	393	385	367	361	363	375	373
26	382	378	364	365	375	390	392	401	407	404	395	373	366	370	375
27	380	381	379	373	384	388	396	401	4 4	397	388	375	376	378	379
28	381	381	381	385	398	409	418	419	414	404	399	397	395	394	391
Mean .	392	393	395	398	404	410	415	415	411	403	397	392	388	396	383
Mean† .	399	400	402	408	415	421	425	427	422	415	409	404	402	399	398

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JANUARY. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
379	362	376	365	376	396	383	375	377	391	8 30	424	15 56	359	1
378	376	376	376	376	370	374	379	381	383	6 30	409	20 16	368	2
384	38	383	382	381	380	383	384	381	385	6 54	398	0 22	376	3
385	382	385	386	385	385	386	386	385	387	7 10	399	4 24	380	4†
388	388	388	388	389	390	391	392	394	395	6 20	420	0 30	383	5†
360	358	363	366	370	382	380	379	376	382	6 4	431	13 44	332	6
375	370	365	354	360	369	375	381	381	381	5 46	411	17 54	350	7
381	384	381	380	381	381	383	386	389	390	6 40	421	13 46	376	8
388	375	372	378	379	380	380	381	387	393	6 24	422	16 32	370	9
386	385	385	382	384	385	387	388	388	392	6 16	421	13 10	381	10†
380	381	385	386	386	386	387	387	391	395	6 12	427	15 20	380	11†
396	393	397	398	397	397	394	393	392	403	6 2	426	0 4	390	12
395	394	394	390	388	389	390	391	394	**406**	6 24	440	18 30	385	13
398	397	393	389	389	393	397	389	379	400	6 52	422	23 28	373	14
353	354	357	362	366	365	363	371	372	**366**	4 20	408	8 46	313	15
366	367	371	373	379	379	380	380	381	376	5 48	401	12 40	360	16
382	380	380	379	379	379	380	380	380	381	6 14	399	9 24	365	17
383	383	382	382	387	390	386	385	387	390	7 10	415	12 30	379	18
321	345	335	346	357	370	366	369	371	382	5 23	430	15 20	**313**	19
369	370	374	375	375	375	376	376	383	380	3 58	406	14 30	368	20
386	386	385	388	390	391	390	393	389	396	6 52	418	16 38	354	21†
375	351	340	338	344	360	362	367	357	385	5 44	**444**	17 10	330	22
363	362	360	364	364	377	373	383	389	369	23 8	392	13 56	356	23
373	372	362	359	365	370	371	373	374	377	5 30	405	12 0	355	24
361	350	362	363	368	371	376	371	380	376	6 36	412	16 2	348	25
366	367	364	369	380	389	389	381	377	387	6 6	417	14 50	360	26
381	383	381	383	372	373	376	385	380	382	2 20	399	10 34	363	27
375	387	377	383	383	380	377	383	382	387	5 32	419	11 2	366	28
356	354	359	360	372	377	385	381	380	379	6 2	404	15 58	351	29
370	371	377	377	378	382	373	381	376	389	6 38	425	15 42	365	30
373	373	380	380	379	380	382	385	383	387	9 4	410	13 38	367	31
375	374	**374**	374	377	380	381	382	382	386					Mean.
384	**384**	385	385	386	386	387	387	387	393					Mean.†

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386	386	385	387	387	386	389	389	393	396	6 58	421	0 0	382	1
381	379	364	367	376	377	379	387	387	392	6 20	422	17 40	356	2
383	387	387	389	391	395	393	393	395	394	6 10	413	14 8	379	3
393	388	381	388	398	397	393	391	393	400	6 50	425	17 10	379	4
399	397	399	4 0	401	400	399	3 9	401	399	4 22	408	10 4	389	5
390	391	393	392	392	393	397	400	404	405	6 4	435	15 6	389	6†
397	396	395	398	399	401	402	403	399	409	6 4	434	16 58	391	7
398	396	394	394	395	396	399	399	397	401	6 50	423	9 50	392	8
376	374	382	384	382	376	381	380	386	389	3 20	412	15 58	372	9
391	391	390	392	393	392	391	397	394	399	5 0	416	15 14	389	10
406	403	397	391	391	393	398	399	400	407	5 36	424	18 30	387	11†
393	392	392	392	393	393	394	396	397	407	5 0	**446**	15 2	391	12
395	395	393	393	394	396	396	398	399	404	6 30	430	17 2	393	13†
397	399	400	404	390	385	393	395	398	406	6 22	444	19 34	376	14
387	3 2	376	379	387	389	391	398	396	399	6 56	437	17 18	367	15
394	394	391	391	391	391	394	395	393	400	7 16	421	17 30	390	16†
400	401	401	402	403	405	405	405	407	405	7 16	425	0 0	393	17†
408	408	403	399	393	389	398	399	399	**412**	7 18	430	20 6	386	18
343	351	355	362	391	369	368	371	372	391	7 6	442	14 2	320	19
368	360	368	373	377	376	378	378	378	374	0 0	408	12 46	343	20
345	345	347	359	389	389	378	388	403	376	22 34	413	15 46	**317**	21
387	382	377	393	391	370	369	369	377	382	1 28	405	20 30	365	22
348	346	367	358	360	375	364	363	370	379	6 14	428	15 30	334	23
340	362	375	370	357	358	371	406	384	**373**	21 10	416	11 40	327	24
375	382	383	384	396	379	379	384	381	381	6 40	405	10 50	356	25
377	374	379	380	383	378	400	405	384	383	8 6	410	1 58	359	26
377	375	379	379	375	377	379	384	385	383	8 4	405	2 50	371	27
392	392	393	392	391	389	390	387	396	395	6 30	422	0 30	380	28
383	383	384	385	388	386	388	391	392	394					Mean.
396	395	393	**392**	392	393	395	396	397	404					Mean.†

*The daily mean values of horizontal force derived from 24 hourly values have been corrected for progressive change by 1/48th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.) 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	389	392	392	399	407	417	423	424	417	409	401	398	398	394	390
2	395	397	396	402	410	422	429	431	422	413	402	399	402	406	405
3	391	392	399	409	417	425	428	431	432	432	433	425	420	405	399
4	390	392	401	405	410	419	430	437	430	418	404	401	396	396	396
5†	393	393	394	399	413	425	435	439	436	429	421	413	407	401	400
6†	400	401	401	406	417	426	435	438	436	427	417	413	405	401	397
7†	403	403	408	414	423	433	438	441	435	424	418	415	413	415	412
8	412	413	419	429	445	458	**465**	463	453	439	431	428	422	409	402
9†	397	395	395	395	403	413	422	423	417	408	399	398	402	403	403
10	401	400	409	415	425	440	449	449	439	431	426	419	416	414	413
11	399	392	408	413	417	431	442	443	435	427	417	403	385	377	387
12	404	405	409	413	421	428	435	437	424	417	405	398	393	392	390
13	403	406	410	418	425	441	451	443	429	418	409	402	390	393	402
14	402	406	407	412	422	419	411	411	406	399	395	391	384	391	394
15	392	396	395	402	411	420	426	430	425	419	412	399	385	379	390
16†	396	399	404	408	413	426	437	435	430	425	418	411	408	407	405
17	405	407	411	415	425	434	442	447	441	431	424	413	407	397	387
18	410	414	407	415	420	423	421	408	401	395	388	377	380	382	386
19	386	384	385	379	400	417	425	429	423	411	395	385	376	381	375
20	383	380	368	386	383	385	388	391	392	388	368	363	376	377	377
21	379	376	381	386	380	388	395	397	395	382	350	355	368	378	374
22	376	389	377	364	381	387	383	381	381	372	371	363	357	360	368
23	383	384	386	396	405	393	400	407	403	398	387	376	365	378	374
24	381	374	373	376	384	399	378	384	388	383	373	375	367	373	367
25	381	369	372	370	379	393	396	388	379	374	372	376	377	376	377
26	377	377	378	386	398	410	420	420	405	385	391	392	385	385	385
27	396	400	403	408	421	441	443	440	432	412	401	387	376	357	**345**
28	375	379	384	389	400	414	425	428	424	418	408	396	391	387	377
29	394	386	387	392	398	411	425	428	420	401	386	367	371	375	372
30	390	389	389	388	401	413	416	414	407	409	407	394	387	385	385
31	392	397	395	389	393	407	419	424	421	412	396	379	384	393	395
Mean .	393	393	395	399	408	418	424	**424**	419	410	401	394	390	389	388
Mean† .	401	401	403	407	416	427	435	**437**	432	424	415	410	407	405	403

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1	402	402	402	402	407	415	422	422	421	418	414	401	402	398	393
2	401	394	393	396	407	424	432	429	425	416	411	413	405	393	386
3	390	392	398	401	406	413	429	439	435	418	394	365	356	370	375
4	389	393	333	406	412	422	438	435	431	423	414	412	419	402	400
5	389	387	395	401	416	431	448	451	445	437	423	413	401	396	385
6	387	385	392	402	413	428	428	417	410	405	401	393	389	389	391
7	395	398	403	419	429	442	**455**	452	448	435	426	414	404	389	389
8	390	389	391	399	411	431	440	430	417	417	407	397	397	396	390
9	405	403	397	402	415	424	430	427	409	391	377	383	385	383	376
10	400	399	401	407	420	429	428	425	417	418	411	400	393	383	381
11†	400	398	399	403	418	428	435	436	429	427	423	414	406	398	396
12†	401	399	399	400	410	426	439	440	437	426	417	414	409	403	400
13†	401	403	403	410	424	438	444	444	439	428	421	416	410	405	402
14	406	405	408	417	430	440	445	441	440	437	434	427	411	393	384
15	393	393	393	393	407	418	425	424	427	426	422	410	398	390	380
16	372	373	379	386	391	396	409	410	401	398	386	387	388	379	373
17	398	395	387	375	380	384	383	387	393	399	387	359	333	**312**	343
18	388	379	381	387	397	394	414	423	402	400	393	390	377	369	357
19	370	369	366	364	375	395	409	397	387	391	381	367	348	364	363
20	381	381	380	388	402	404	384	389	388	375	370	366	377	374	372
21	376	377	372	371	381	393	404	399	391	390	381	381	379	380	381
22	395	386	377	381	391	391	401	391	382	369	365	365	360	363	363
23	381	383	385	391	401	409	394	390	404	400	395	392	385	372	355
24	375	377	377	386	395	405	409	415	412	401	395	391	388	387	383
25	386	377	373	379	391	401	409	409	406	401	398	394	389	381	384
26	383	387	385	383	390	400	411	413	402	398	398	399	389	372	372
27	382	380	380	383	393	404	411	409	404	400	402	403	398	390	385
28†	391	387	382	380	395	406	415	416	417	410	401	402	395	395	394
29†	391	391	391	397	408	420	423	421	413	406	395	392	389	387	392
30	393	393	397	404	419	429	432	426	422	416	410	409	413	413	408
Mean .	390	389	389	394	405	415	**422**	420	415	409	402	396	389	384	382
Mean† .	397	396	395	398	411	424	**432**	432	427	419	411	408	402	397	397

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
387	387	383	386	387	395	389	389	389	398	6 20	426	17 0	383	1
402	400	397	396	397	399	395	395	390	404	7 10	433	23 0	388	2
401	388	380	385	387	395	399	398	393	407	8 10	437	16 54	379	3
395	393	391	387	383	386	389	390	391	401	6 36	437	18 48	382	4
398	397	397	398	398	401	400	400	400	408	7 16	441	16 30	397	5†
400	397	396	397	397	399	401	400	401	409	7 20	440	14 20	394	6†
408	406	401	400	403	403	404	405	411	414	7 12	443	17 50	398	7†
397	397	397	397	401	398	397	392	389	419	6 30	468	23 0	389	8
403	402	402	402	401	401	401	402	402	404	6 30	427	10 20	399	9†
409	409	411	408	406	405	408	407	405	417	6 12	451	0 36	397	10
391	386	387	389	391	393	396	395	402	405	6 40	445	12 46	375	11
396	393	391	392	393	393	394	394	396	405	7 2	440	13 54	387	12
392	373	373	385	384	392	392	395	396	405	6 4	453	16 40	369	13
388	386	388	383	385	387	390	391	391	397	4 4	427	17 38	383	14
391	391	391	393	395	395	394	397	396	401	6 43	433	12 46	378	15
402	399	399	400	401	401	401	402	404	410	5 52	437	0 0	396	16†
390	397	395	396	397	398	408	409	408	412	6 58	447	14 20	385	17
367	369	388	383	395	397	404	394	416	397	5 48	435	15 42	355	18
384	375	377	369	385	382	396	394	383	391	6 58	431	18 30	354	19
379	373	391	372	364	384	377	375	377	379	17 18	396	10 20	354	20
379	373	377	372	376	378	383	390	390	379	6 22	399	10 4	347	21
360	372	380	382	385	375	384	387	385	376	1 0	395	11 24	341	22
361	364	383	372	377	374	397	391	380	385	3 44	410	15 24	353	23
377	371	362	380	376	375	371	385	379	377	4 52	402	16 40	353	24
367	378	375	373	379	381	376	376	379	377	5 40	401	15 10	365	25
385	389	384	383	388	392	395	396	397	392	6 42	428	0 10	376	26
367	378	367	381	384	376	370	375	377	393	5 30	445	14 4	338	27
370	375	383	390	381	386	395	390	394	395	7 4	430	15 2	367	28
375	370	374	378	385	386	386	387	397	389	7 8	430	15 40	363	29
384	380	384	385	387	386	385	387	388	393	6 8	417	15 30	378	30
390	387	388	392	402	395	395	395	394	397	7 8	426	11 0	375	31
387	386	387	387	389	391	393	393	393	398					Mean.
401	399	398	398	398	399	399	399	401	409					Mean.†

APRIL

389	384	385	391	390	390	391	394	391	401	5 52	425	15 30	383	1
385	389	390	393	391	399	394	391	390	402	6 0	433	14 30	384	2
375	372	374	373	376	383	384	386	390	391	7 18	444	11 54	351	3
397	394	391	389	391	391	393	397	397	405	6 32	442	18 0	387	4
379	380	390	385	384	385	387	387	388	403	6 36	458	15 30	376	5
393	396	398	399	398	397	404	397	393	401	5 30	433	0 34	384	6
370	388	389	389	390	391	397	384	385	407	5 54	461	14 48	368	7
386	382	380	399	400	398	401	400	403	403	6 20	443	16 56	379	8
377	389	385	390	391	393	394	394	398	397	6 34	436	9 50	373	9
394	397	393	398	400	400	400	400	400	404	5 30	434	14 0	380	10
394	394	396	395	397	397	398	397	400	407	6 30	437	15 2	394	11†
400	400	399	400	401	402	402	404	403	410	6 42	442	16 30	398	12†
401	403	404	403	402	403	403	401	405	413	6 8	446	15 2	399	13†
390	385	384	378	380	393	396	393	392	408	6 10	446	18 16	377	14
379	383	382	367	361	355	392	386	377	395	9 42	429	20 27	352	15
379	382	379	380	394	404	386	387	391	388	19 32	421	14 2	369	16
349	361	363	359	367	372	380	391	387	372	0 34	403	12 50	302	17
359	372	382	381	392	382	375	385	379	385	6 56	427	14 30	349	18
367	373	367	371	380	380	378	373	379	376	6 24	415	12 8	342	19
369	351	348	360	370	376	374	374	374	376	4 32	413	16 38	342	20
380	383	382	376	394	384	385	387	409	385	22 50	417	18 10	371	21
373	375	382	389	385	383	391	394	389	381	6 20	403	11 38	358	22
358	366	377	375	368	385	382	377	376	383	5 24	413	14 30	350	23
380	378	374	372	379	382	380	379	381	388	6 29	417	17 56	368	24
379	376	389	381	379	378	378	377	380	387	6 36	411	2 18	371	25
385	385	374	375	374	395	384	381	381	388	6 20	416	13 30	366	26
381	380	381	384	396	395	393	406	399	393	21 46	413	15 24	379	27
389	389	387	388	389	387	384	383	383	395	7 56	419	2 38	376	28†
393	392	392	393	395	394	390	389	392	398	5 44	425	12 6	386	29†
404	403	433	429	417	403	419	408	397	412	16 38	441	23 58	376	30
382	383	385	385	388	389	391	390	390	395					Mean.
395	395	395	396	397	396	395	394	396	405					Mean.†

*See footnote on page B-17.

†Five international quiet days.

MAY

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)
37000γ PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	384	365	373	385	394	397	416	413	396	388	391	383	377	357	294
2	311	322	331	337	343	361	360	348	347	346	343	346	350	350	350
3	361	361	367	377	385	389	392	382	385	387	379	367	366	369	370
4	375	377	377	379	385	389	389	387	389	386	385	381	384	383	378
5	375	377	379	388	398	402	392	403	403	397	392	384	381	369	367
6	384	378	370	376	389	383	388	387	384	380	365	353	371	369	376
7	381	383	385	394	403	414	409	396	393	383	374	377	371	366	366
8	383	383	387	395	405	414	419	416	407	400	394	392	389	388	383
9†	392	393	398	405	413	420	417	415	410	403	397	392	391	389	389
10†	392	389	389	394	403	414	420	415	402	394	399	397	397	393	391
11	392	390	393	401	405	406	408	406	402	394	390	393	395	393	388
12†	396	395	399	410	420	427	432	430	419	411	407	406	405	404	401
13	404	408	414	415	412	414	429	431	419	405	391	376	369	373	379
14	392	402	405	416	429	438	445	445	434	425	415	407	398	389	391
15	366	371	378	389	388	386	390	392	392	383	376	368	372	375	380
16	390	385	392	405	412	416	412	403	395	388	379	378	379	386	389
17	385	387	393	404	412	421	425	421	412	409	403	397	393	393	394
18	379	383	391	395	409	385	381	375	364	368	353	351	351	359	367
19	382	382	385	397	412	424	431	429	423	407	396	388	380	371	371
20	385	389	393	400	407	411	401	403	402	400	394	392	389	389	387
21	394	396	404	417	428	435	437	429	425	413	403	399	396	393	392
22	398	399	405	412	424	436	436	431	427	426	421	411	400	394	393
23	398	398	404	411	422	426	431	430	428	417	407	399	395	393	394
24†	400	401	402	409	417	427	436	435	430	420	411	405	401	400	409
25	411	405	413	420	428	435	443	442	433	424	411	405	402	396	395
26†	408	409	414	423	436	445	445	436	425	416	409	408	407	403	402
27	407	408	415	431	451	463	467	459	451	440	432	423	415	411	415
28	396	391	404	409	408	412	421	423	421	414	409	406	400	399	400
29	407	408	413	416	426	438	444	464	459	449	441	432	428	419	402
30	398	386	384	388	394	398	409	411	399	384	371	366	363	360	361
31	397	399	404	411	405	403	408	414	417	413	405	384	385	382	360
Mean .	388	388	392	400	409	414	417	415	409	402	395	389	387	384	382
Mean† .	399	399	402	410	419	428	431	427	418	409	405	402	400	397	398

JUNE.

1	397	399	401	393	409	419	414	412	409	414	406	395	385	373	378
2	391	395	399	409	415	421	429	437	434	417	393	381	382	384	388
3	395	396	401	410	421	431	429	420	405	402	396	389	382	385	389
4	396	396	407	419	432	441	439	434	430	423	412	402	395	396	400
5†	397	398	406	419	432	439	437	428	422	413	404	399	400	402	399
6†	402	404	408	417	421	428	431	428	426	420	412	407	404	404	404
7	408	412	421	428	433	435	432	428	428	422	419	411	408	408	408
8	413	411	416	422	426	430	439	447	443	429	419	401	397	401	400
9	382	383	387	393	395	406	417	415	411	404	402	396	383	374	376
10	393	395	404	416	425	431	439	445	442	435	428	416	407	402	403
11	397	400	409	419	434	440	438	438	428	418	409	401	393	394	399
12	401	399	407	417	425	435	438	436	431	425	419	412	405	401	403
13	403	410	400	392	397	394	409	414	412	416	412	404	387	382	375
14	391	394	387	383	392	401	411	409	388	398	398	395	387	386	385
15	397	394	391	402	402	407	415	421	422	413	400	393	398	392	393
16†	401	401	405	413	421	429	441	446	444	436	426	417	407	401	397
17	402	400	406	414	423	433	437	432	429	421	413	407	400	391	390
18†	398	401	406	410	415	420	424	422	415	407	397	391	389	389	391
19	402	403	406	417	428	427	432	441	441	432	425	419	405	402	397
20	393	392	411	406	394	389	386	395	401	394	389	381	385	383	376
21	404	407	411	415	419	430	426	419	412	407	397	388	373	371	383
22	409	412	418	421	427	441	439	440	434	429	423	415	409	404	404
23	405	408	414	421	427	438	439	435	437	437	423	413	406	405	406
24†	407	408	413	419	431	433	428	429	428	425	421	416	408	403	403
25	411	413	427	439	449	453	455	449	439	432	432	442	442	438	436
26	413	417	418	424	432	428	432	431	432	425	410	404	402	399	403
27	411	414	420	427	437	447	459	465	462	439	425	418	405	394	391
28	403	411	415	423	430	439	440	440	439	432	430	431	420	411	393
29	403	407	408	412	420	417	424	428	422	409	405	404	398	393	388
30	403	404	410	415	417	429	434	435	437	430	421	411	404	397	397
Mean .	401	403	408	414	421	427	430	431	427	420	412	405	399	395	395
Mean† .	403	404	408	417	426	431	433	431	428	421	412	406	402	400	399

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MAY. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
266	252	244	225	261	268	300	311	312	338	6 32	428	17 52	206	1
355	352	355	357	357	357	357	363	367	349	22 46	369	0 40	305	2
370	373	366	366	379	371	372	373	373	375	5 40	394	11 26	358	3
367	354	359	364	382	379	374	374	375	378	19 10	401	16 14	352	4
377	381	380	381	379	376	383	376	380	384	7 10	406	13 48	364	5
372	373	378	380	380	387	383	381	379	378	3 54	393	11 6	350	6
374	375	376	377	379	381	384	384	384	384	5 28	416	13 30	362	7
380	383	386	391	387	388	389	390	391	393	6 18	421	14 44	379	8
389	3 0	393	394	394	393	394	396	395	399	5 28	421	13 10	388	9†
389	390	389	391	392	392	392	392	392	396	6 0	421	14 58	389	10†
387	386	385	393	395	395	394	395	395	395	6 18	410	16 20	384	11
401	399	404	406	405	404	402	401	404	408	6 30	434	15 50	399	12†
380	382	383	386	385	385	397	396	390	397	6 28	436	12 8	368	13
384	371	360	360	362	363	391	375	375	398	6 10	447	19 28	355	14
383	384	383	384	389	387	382	387	393	383	6 16	396	10 44	366	15
389	388	387	393	394	392	385	383	384	392	4 40	417	10 10	378	16
396	391	389	382	385	377	379	385	385	396	6 20	425	19 42	375	17
372	374	375	375	384	380	382	378	379	375	3 52	414	12 17	346	18
373	377	377	379	388	388	394	384	383	393	5 38	432	13 4	365	19
388	388	389	388	388	392	392	394	396	394	4 46	414	0 0	385	20
391	389	386	392	390	392	392	394	395	403	5 46	440	17 0	386	21
397	393	387	387	391	391	392	392	399	406	5 16	439	17 10	385	22
393	389	390	397	399	398	398	402	401	405	6 20	436	16 30	389	23
409	408	410	412	409	409	407	405	408	412	6 30	437	12 46	399	24†
399	399	401	407	413	413	409	411	409	413	6 20	445	13 34	393	25
400	400	401	403	404	406	407	408	408	413	5 30	446	16 0	400	26†
422	422	410	410	408	405	408	403	401	424	5 44	469	23 41	396	27
399	401	403	405	406	405	404	405	408	407	6 40	425	0 56	388	28
387	373	373	381	382	382	409	399	399	414	6 34	469	16 0	371	29
366	375	377	390	385	388	393	394	397	385	7 16	420	13 50	359	30
367	385	392	387	388	392	387	386	391	394	8 0	423	14 12	350	31
381	381	380	382	385	385	388	388	389	393					Mean.
397	397	399	400	400	400	399	399	399	406					Mean.†

JUNE.

376	382	378	377	382	389	392	390	389	394	5 0	423	13 0	369	1
391	389	390	401	398	395	397	396	397	401	7 16	439	11 20	377	2
390	396	395	397	395	397	400	399	397	401	5 30	434	12 6	381	3
398	398	400	403	403	402	400	399	400	409	5 18	343	0 48	394	4
402	400	403	403	405	404	404	403	402	409	5 14	440	0 14	396	5†
403	404	404	404	405	406	406	4 7	407	411	5 54	432	0 0	401	6†
408	411	419	408	410	412	413	413	414	417	5 35	435	12 10	407	7
398	398	400	399	391	384	383	380	382	408	6 56	451	21 44	379	8
380	381	376	384	385	387	389	391	391	391	6 33	425	12 50	370	9
405	400	401	401	403	404	403	399	398	412	6 50	447	0 10	392	10
399	402	402	403	403	402	402	402	401	410	5 10	441	12 6	390	11
403	403	405	407	406	405	405	399	405	412	6 20	440	22 20	394	12
381	371	370	387	394	387	386	392	396	394	7 30	423	16 10	368	13
385	387	391	390	395	395	391	387	394	393	6 16	417	0 14	381	14
391	390	394	399	397	396	397	403	402	401	7 20	423	1 50	383	15
398	399	399	399	398	399	401	400	399	412	7 10	448	13 58	397	16†
393	400	400	400	402	402	399	399	401	408	5 34	440	13 2	389	17
393	394	395	395	394	396	397	399	401	402	6 10	426	12 14	389	18†
393	392	393	390	391	389	397	396	394	409	7 44	444	18 14	387	19
370	382	396	3 9	406	411	403	412	411	395	22 54	419	14 46	367	20
395	400	407	407	406	410	405	408	408	404	5 0	431	12 44	367	21
406	409	408	405	405	405	408	407	407	416	4 48	447	17 36	401	22
407	406	406	413	417	416	409	407	414	417	5 40	441	12 30	404	23
405	406	407	410	409	409	411	411	410	415	4 50	435	13 0	402	24†
432	424	413	407	397	405	404	410	410	428	5 40	457	19 14	394	25
401	400	400	397	400	402	404	408	410	412	3 52	437	17 37	395	26
393	400	407	408	411	408	408	408	407	419	7 18	467	14 30	378	27
386	387	386	399	399	406	413	411	406	415	5 0	445	16 24	379	28
384	397	401	400	401	403	403	400	401	405	6 36	430	14 44	383	29
399	399	401	401	403	403	403	402	403	411	8 0	438	13 10	395	30
395	397	398	400	400	401	401	401	402	408					Mean.
400	400	401	401	401	401	402	402	402	410					Mean.†

*See footnote on page B-17.
†Five international quiet days.

JULY. (Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.) 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	405	405	411	413	411	417	430	432	429	423	415	409	404	402	406
2	404	413	413	419	428	440	444	441	445	440	433	418	407	401	403
3	405	406	429	436	446	455	454	455	458	454	440	422	411	409	413
4	412	414	421	424	423	427	438	449	451	448	443	435	420	412	403
5	406	405	409	419	426	430	438	433	435	435	429	423	415	412	407
6	412	415	414	419	414	414	431	445	445	437	419	405	404	404	402
7	405	407	411	421	437	451	457	457	446	436	425	419	409	407	405
8	410	409	409	422	431	439	437	439	437	432	425	420	416	411	408
9	424	414	420	421	433	442	443	435	422	407	390	403	376	363	484
10	392	395	399	408	413	417	428	432	435	429	416	402	399	397	397
11	399	393	389	401	417	432	447	452	451	433	417	407	401	404	401
12	398	396	398	400	419	433	439	443	443	436	422	410	401	400	397
13†	397	399	405	417	433	444	448	444	443	437	431	419	410	406	406
14†	403	402	403	408	419	428	436	436	435	429	415	405	403	403	403
15†	402	403	409	417	428	438	443	443	439	437	431	419	409	403	403
16	408	408	413	416	425	425	432	437	434	430	420	414	410	409	406
17	406	411	419	429	438	441	440	439	441	445	443	425	405	383	374
18	406	394	403	407	407	420	421	419	419	415	401	395	385	381	394
19	400	403	406	411	420	424	429	430	434	430	417	403	400	400	398
20	401	397	402	407	413	421	429	425	420	403	401	403	399	397	395
21†	399	397	400	410	428	443	445	440	434	429	420	411	403	401	404
22	404	405	408	420	422	425	425	423	425	417	413	407	406	399	393
23	412	409	417	431	446	**458**	457	452	446	439	439	421	403	393	363
24	407	406	404	390	375	399	418	411	371	385	386	377	358	**357**	368
25	388	389	396	410	419	427	424	423	422	414	400	383	373	379	386
26	395	396	401	**407**	409	415	423	432	431	428	418	410	405	402	403
27	410	409	413	423	430	432	435	441	442	434	413	403	388	377	383
28	407	404	403	404	407	406	405	408	408	406	405	401	398	397	397
29	401	404	405	412	419	426	437	441	437	430	426	418	403	392	391
30†	402	401	399	404	413	425	428	428	425	416	409	401	398	401	400
31	412	411	409	417	427	442	451	448	439	433	431	429	422	414	412
Mean . .	404	404	408	414	422	430	436	**437**	434	428	419	**410**	401	397	397
Mean† . .	403	403	405	413	426	437	**442**	439	436	431	421	411	404	403	403

AUGUST.

1†	417	415	415	421	433	439	441	448	450	442	436	429	425	422	422
2	414	415	422	434	450	462	**464**	461	456	444	428	417	414	411	410
3	413	415	420	431	441	451	455	455	452	447	437	428	420	416	416
4	411	411	418	429	439	447	453	452	450	447	441	430	419	418	421
5	420	422	425	431	437	449	456	445	433	418	411	419	399	377	**320**
6	364	368	377	370	372	379	379	389	399	397	392	377	369	377	375
7	385	383	387	399	408	417	420	419	414	404	393	385	380	382	381
8	391	392	393	407	414	423	433	437	433	425	413	408	401	397	395
9†	406	404	406	410	416	424	424	424	422	414	406	401	400	397	395
10†	407	407	406	411	418	425	425	420	418	411	410	407	403	405	407
11†	412	412	414	425	436	441	442	443	438	428	419	412	408	407	**407**
12	409	409	411	417	426	431	434	436	436	431	425	417	416	417	417
13	417	418	416	419	428	441	452	462	457	443	416	387	384	392	391
14	407	413	404	397	405	411	410	398	396	400	404	403	396	394	379
15	401	403	405	411	416	419	416	422	419	409	409	403	396	393	401
16	411	410	411	417	432	435	439	440	433	427	420	418	415	416	416
17	411	413	413	416	423	424	430	423	403	407	425	420	412	397	382
18	405	406	403	410	417	421	410	407	411	405	398	398	397	400	**407**
19	403	413	413	412	421	425	423	389	418	419	414	**407**	398	399	399
20	405	404	405	416	418	425	425	425	428	421	415	413	406	403	413
21	405	404	405	413	417	422	425	426	425	405	382	368	374	387	389
22	399	404	407	413	425	431	435	424	411	408	402	403	400	401	403
23	415	416	419	419	426	442	443	450	433	417	419	418	407	403	383
24	411	412	417	427	441	449	452	451	436	405	411	404	396	406	406
25	391	397	398	407	415	416	415	407	404	411	406	398	403	403	401
26	414	420	427	431	450	460	454	446	436	433	434	422	409	407	416
27	419	420	424	428	432	442	442	441	439	431	433	437	432	430	427
28	423	426	427	425	430	438	435	433	437	439	436	435	433	428	424
29	417	425	427	429	438	442	438	435	434	430	430	427	423	422	421
30	424	426	427	431	437	443	447	447	446	443	441	439	435	435	436
31†	425	422	421	427	436	444	447	446	442	441	440	436	431	431	429
Mean . .	408	409	412	417	426	433	**435**	432	429	423	418	412	407	412	403
Mean† . .	414	413	412	419	428	435	436	**437**	434	427	422	417	413	412	412

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JULY 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
405	405	407	408	405	402	405	403	405	411	7 40	433	12 38	398	1
401	403	402	405	406	406	406	410	410	417	5 44	447	14 48	401	2
413	413	417	417	408	407	407	407	410	**425**	8 10	459	0 42	401	3
400	404	406	407	405	408	407	405	406	419	8 4	453	14 22	397	4
406	407	410	412	413	412	413	413	414	418	6 2	439	15 18	404	5
401	400	401	402	405	403	403	405	405	413	7 40	451	15 20	399	6
404	407	408	410	410	412	410	407	410	420	6 20	459	14 50	403	7
407	415	417	410	412	415	438	449	444	423	21 48	450	14 20	407	8
385	387	389	391	399	389	389	390	389	403	5 30	447	12 42	350	9
398	401	401	399	397	407	395	400	401	407	8 13	440	0 0	391	10
388	388	393	391	393	395	395	397	397	408	6 42	455	15 26	379	11
396	395	397	396	397	401	397	396	397	409	8 10	445	14 42	394	12
405	402	400	397	401	403	403	403	403	415	5 58	450	0 0	397	13†
403	402	403	403	403	404	403	401	403	411	6 30	440	1 22	400	14†
403	403	403	408	407	408	407	407	409	416	5 32	443	0 2	401	15†
410	414	415	412	410	410	404	405	405	416	6 58	438	21 8	401	16
382	393	394	397	403	407	409	407	406	414	9 50	448	14 0	371	17
400	401	398	399	402	399	398	397	398	402	5 26	424	13 12	379	18
395	397	398	398	399	397	398	401	401	408	8 10	436	14 50	394	19
391	391	393	396	398	397	400	400	399	403	6 4	431	9 28	392	20
403	401	3 9	397	398	400	404	406	406	412	6 10	448	0 50	396	21†
396	401	407	408	411	412	411	410	411	411	5 28	429	14 24	392	22
369	372	371	375	378	392	402	402	421	411	5 14	**461**	14 18	**346**	23
360	392	388	389	390	390	389	388	388	**387**	6 44	426	12 14	351	24
385	386	386	386	387	390	393	393	399	397	5 6	428	12 18	370	25
396	388	393	395	398	397	399	399	400	406	7 20	435	16 24	384	26
391	391	395	399	399	402	405	395	405	409	8 0	444	13 30	374	27
397	398	400	400	403	403	402	400	401	403	7 14	410	14 54	396	28
395	393	396	397	401	403	405	403	403	410	6 58	443	13 42	388	29
402	402	403	404	407	406	403	405	409	408	7 16	432	1 40	398	30†
408	405	404	407	415	411	410	411	417	420	5 56	453	16 38	403	31
397	399	400	401	402	403	404	404	405	411					Mean.
402	401	**401**	401	401	403	402	402	403	412					Mean.†

AUGUST.

421	420	419	417	416	414	412	411	413	425	7 50	452	21 52	411	1†
409	**407**	410	411	411	410	407	415	411	425	5 34	467	20 50	407	2
415	414	413	415	415	414	412	411	411	426	6 30	457	22 4	411	3
422	420	419	417	416	417	419	419	416	427	6 34	455	0 30	411	4
321	351	364	330	342	335	353	351	361	389	6 13	462	18 30	**312**	5
371	373	369	383	387	383	383	385	384	**380**	8 4	401	0 10	361	6
382	381	384	391	390	390	391	390	393	394	6 15	424	13 40	378	7
392	395	399	398	399	399	398	395	399	406	7 18	439	0 14	389	8
395	397	395	393	395	399	399	399	400	405	5 20	427	17 54	392	9†
406	406	407	406	408	408	408	410	411	410	5 28	428	11 58	403	10†
407	408	409	408	407	407	407	406	408	417	7 10	445	21 58	405	11†
416	418	417	418	421	420	417	415	415	421	7 52	438	1 30	409	12
392	400	393	391	399	405	392	397	413	413	7 36	467	11 41	378	13
376	380	383	388	393	397	397	405	403	397	5 24	416	14 52	375	14
404	409	405	402	419	414	413	413	411	409	18 48	425	13 4	392	15
415	412	409	408	411	410	409	411	415	418	6 20	443	17 52	407	16
385	393	395	392	394	394	398	399	402	406	6 28	435	14 30	380	17
403	389	378	383	393	415	409	403	403	403	4 58	425	17 10	372	18
408	408	405	404	403	405	412	407	405	409	5 34	430	13 24	397	19
407	413	414	407	409	417	409	417	413	414	5 36	431	18 36	399	20
379	381	395	387	389	408	401	395	398	399	7 26	434	11 0	363	21
401	401	403	406	409	413	413	413	412	411	5 46	437	0 0	400	22
383	398	393	393	410	405	400	408	411	413	6 44	457	14 34	368	23
396	393	403	396	394	390	387	391	391	411	6 4	453	20 34	385	24
400	402	404	407	411	412	415	417	412	407	4 20	420	0 8	391	25
419	419	418	422	424	423	421	419	422	427	4 42	**471**	12 40	405	26
418	417	417	418	419	417	413	417	420	427	5 34	448	20 50	413	27
424	423	421	424	425	421	420	423	419	428	8 22	441	23 36	416	28
421	419	419	419	421	422	422	424	424	426	5 2	444	0 0	417	29
431	428	425	423	427	428	428	424	423	**433**	6 4	447	22 30	422	30
428	427	430	431	428	428	430	431	428	433	6 10	449	1 36	421	31†
401	403	404	403	**406**	407	406	407	408	413					Mean.
411	411	412	**411**	411	411	411	411	411	418					Mean.†

*See footnote on page B-17.

†Five international quiet days,

SEPTEMBER. (Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.) 37000 γ PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	430	439	445	449	455	462	467	470	463	451	443	432	434	429	422
2	429	429	438	445	460	464	466	465	452	444	432	433	431	432	437
3†	432	429	428	430	449	459	462	458	454	448	444	439	430	429	426
4	429	430	430	431	443	448	451	448	443	434	427	429	428	426	424
5†	426	428	428	433	451	466	468	464	461	451	445	440	436	433	429
6†	433	432	427	429	437	445	453	448	446	441	432	428	429	430	431
7	429	429	429	429	438	447	450	449	446	442	436	428	419	414	413
8	417	421	420	424	438	450	447	439	418	411	411	419	419	414	409
9	430	438	437	447	456	439	417	371	318	275	275	317	313	290	288
10	361	366	357	361	373	374	376	394	391	386	376	372	374	371	375
11	385	384	389	397	421	437	437	427	409	396	395	388	384	379	381
12	392	396	395	384	387	399	401	406	402	399	385	379	380	385	381
13	392	392	393	398	408	426	434	432	422	410	401	406	390	368	345
14	377	389	380	374	380	382	382	385	389	388	387	375	379	386	378
15	394	395	389	385	359	358	361	376	385	386	379	361	346	334	355
16	399	389	380	375	385	401	408	412	413	401	382	388	392	393	393
17	406	404	394	393	403	413	419	420	422	419	415	408	407	404	404
18	407	402	388	382	376	383	409	424	422	412	405	399	396	402	401
19	401	401	403	407	414	418	422	426	422	416	418	412	407	409	412
20	411	415	398	398	395	393	406	414	415	414	412	407	405	401	396
21	409	410	407	401	407	412	420	419	422	417	407	400	403	403	411
22	421	414	406	403	409	414	418	421	421	417	412	398	387	391	397
23†	413	410	407	407	415	427	431	429	419	421	418	414	411	408	405
24†	412	410	409	411	420	433	437	434	428	422	417	408	406	410	407
25	417	415	409	414	426	443	454	455	448	436	423	414	412	408	413
26	415	415	415	412	417	434	441	439	431	428	429	430	428	427	423
27	424	435	434	445	456	442	443	443	439	436	433	432	431	428	425
28	414	413	416	416	426	436	441	441	437	431	423	421	419	419	420
29	421	419	419	428	440	448	461	466	456	446	432	429	428	422	420
30	422	422	422	425	436	448	449	449	448	442	433	427	422	420	417
Mean . .	412	412	410	411	419	427	431	431	425	417	411	408	405	402	401
Mean† . .	423	422	420	422	435	446	450	447	442	437	431	426	422	422	419

OCTOBER.

1†	415	414	407	408	418	432	441	437	432	432	417	417	420	421	421
2	423	425	430	434	442	464	468	458	454	436	423	417	419	415	414
3	424	424	423	425	433	441	452	450	447	441	435	435	437	436	434
4	427	427	425	424	431	438	447	460	451	436	434	434	429	429	428
5	414	415	411	404	413	412	429	433	425	418	412	381	372	393	394
6	408	406	403	407	421	430	435	441	433	411	408	412	398	407	402
7	414	417	409	416	429	429	427	415	431	423	401	386	408	411	407
8	401	403	409	410	412	431	437	432	418	417	386	397	403	403	407
9	417	417	405	398	409	427	437	439	428	419	419	414	406	406	406
10	420	407	397	397	403	416	418	415	403	390	376	382	399	399	404
11	406	410	412	417	421	430	436	437	431	417	409	407	410	407	405
12	421	407	405	408	407	414	408	411	424	424	420	409	384	384	393
13	413	414	413	416	429	434	442	449	440	430	419	408	403	389	376
14	425	416	410	416	420	422	432	433	429	418	416	401	391	393	408
15	406	407	408	412	417	421	425	433	433	425	424	419	414	410	409
16†	411	412	414	423	429	439	450	443	427	417	413	408	404	408	408
17	417	420	423	441	457	461	462	461	449	436	427	426	425	421	422
18	432	442	439	441	448	455	439	412	386	376	384	377	368	358	368
19	399	400	410	416	423	430	435	432	426	421	413	411	413	413	411
20	416	415	416	411	432	440	446	440	430	421	413	409	409	411	415
21†	418	418	428	436	447	458	462	460	443	429	417	416	414	414	416
22	423	427	431	432	436	442	453	454	441	424	425	421	422	420	418
23	422	422	425	432	445	462	470	462	451	438	434	435	432	432	427
24	427	424	427	432	441	450	452	456	461	446	437	431	429	431	436
25	429	427	426	427	428	422	426	432	409	421	424	425	424	423	419
26	419	425	426	431	436	446	451	432	435	431	428	426	421	417	416
27	423	424	417	416	412	414	416	418	415	416	421	4.4	422	421	421
28†	423	423	428	435	441	449	452	448	441	435	430	425	422	422	422
29†	427	431	435	438	440	447	451	449	441	432	426	425	424	423	423
30	429	429	427	429	435	440	447	447	443	435	430	425	422	425	425
31	430	431	434	434	443	452	462	462	456	451	449	444	444	451	447
Mean . .	419	419	419	421	429	437	442	440	434	424	418	414	413	413	413
Mean† . .	421	422	424	429	437	447	453	449	438	428	421	418	417	417	417

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

SEPTEMBER. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
424	423	424	424	428	429	432	432	430	439	6 54	**473**	14 6	421	1
436	432	426	429	432	434	430	425	439	**439**	6 14	471	22 18	421	2
427	421	423	425	428	427	424	425	425	435	6 4	464	16 12	421	3†
424	422	421	419	424	429	427	424	426	431	6 24	454	18 22	416	4
427	427	427	428	429	430	430	431	425	438	5 30	472	0 2	428	5†
430	430	429	432	434	433	432	434	429	434	6 0	457	2 10	426	6†
409	414	411	415	414	414	415	416	417	425	5 24	452	15 10	407	7
411	412	409	415	417	418	418	426	425	421	5 18	454	17 16	408	8
304	311	328	336	337	339	350	351	361	**354**	4 20	468	9 54	**255**	9
372	380	381	379	377	378	382	381	381	376	7 20	399	2 30	356	10
379	381	377	380	385	385	388	391	392	395	5 30	442	15 12	376	11
383	384	386	386	387	390	393	392	392	390	7 18	408	10 58	377	12
342	318	321	340	354	405	370	374	374	384	6 10	436	16 10	311	13
377	380	389	398	381	397	392	393	394	385	17 38	407	11 34	365	14
366	371	386	384	377	384	390	399	403	376	22 50	406	13 20	329	15
387	395	406	400	399	400	411	420	406	397	7 36	416	3 4	375	16
410	411	411	413	411	413	411	405	408	409	8 5	425	2 6	393	17
400	400	399	399	401	406	405	401	402	401	7 40	428	3 49	375	18
407	400	397	397	402	402	407	412	409	409	6 58	428	17 38	395	19
404	399	399	402	403	404	403	405	407	404	0 36	420	4 26	387	20
410	408	405	408	410	412	412	419	419	411	7 34	423	2 58	398	21
399	397	401	405	406	407	409	411	413	407	0 4	423	11 52	386	22
406	405	405	407	412	416	415	410	417	414	6 30	434	15 30	403	23†
404	398	406	410	414	418	417	416	417	415	5 48	439	15 46	398	24†
417	403	395	382	382	384	402	414	415	416	6 44	458	17 34	376	25
21	421	421	420	416	416	415	421	423	423	6 44	445	2 46	409	26
425	420	419	418	414	423	414	412	417	429	4 4	462	19 40	409	27
423	423	425	431	423	419	426	420	417	424	6 50	445	22 58	414	28
424	424	422	415	415	416	416	419	421	429	6 58	469	18 14	409	29
417	418	419	423	421	428	419	415	417	427	5 22	451	14 40	414	30
402	**401**	402	404	404	409	408	410	411	411					Mean.
419	**416**	418	420	423	425	423	423	422	427					Mean.†

OCTOBER.

421	420	421	421	422	427	431	431	432	423	6 14	443	2 42	407	1†
413	413	415	417	414	416	417	420	423	428	6 4	**473**	15 50	411	2
431	428	429	429	431	430	431	428	424	433	6 50	455	12 4	423	3
417	409	408	409	408	411	414	418	419	426	7 10	462	16 40	400	4
394	395	389	399	408	406	407	421	410	406	6 40	437	11 40	**353**	5
401	402	406	409	407	410	408	410	413	412	7 26	443	12 24	391	6
403	401	389	393	390	395	409	412	404	409	8 10	436	11 4	379	7
412	408	414	409	409	410	413	414	412	411	6 8	439	9 52	386	8
404	400	401	406	421	421	413	409	417	414	19 16	446	3 14	392	9
401	402	398	397	397	408	405	409	407	**402**	5 44	423	10 12	373	10
407	407	412	411	408	416	415	411	411	415	6 20	440	13 50	403	11
402	409	409	411	411	412	414	414	411	409	8 44	426	12 20	383	12
389	398	417	420	417	420	415	418	408	415	7 0	453	13 50	372	13
407	408	403	421	413	408	417	408	406	413	6 14	435	12 34	386	14
411	395	399	405	410	415	414	413	412	414	7 30	435	16 10	393	15
406	403	406	411	413	413	415	418	417	417	5 50	453	16 16	403	16†
417	418	420	420	412	416	412	416	432	430	6 54	465	15 50	408	17
373	392	394	393	394	395	409	403	399	402	5 14	459	12 46	356	18
417	407	411	411	408	413	414	413	413	415	6 14	436	0 38	399	19
408	406	409	412	412	407	411	413	419	418	5 54	450	15 50	406	20
417	416	418	414	419	418	423	422	424	427	6 2	464	17 50	413	21†
418	419	420	421	421	421	420	419	420	427	6 41	458	15 36	417	22
426	427	428	428	429	430	429	434	433	436	5 58	472	0 16	423	23
419	404	402	419	421	418	422	423	425	431	7 34	468	16 8	389	24
412	401	410	411	413	419	417	418	417	420	7 6	436	15 46	398	25
415	428	419	421	422	422	418	429	423	427	6 12	454	15 8	408	26
419	419	421	421	425	421	425	421	423	420	0 58	427	3 38	410	27
424	424	423	423	425	425	425	425	426	430	6 8	456	12 6	419	28†
425	423	423	24	425	426	427	426	427	431	5 50	454	14 6	422	29†
424	420	425	422	422	426	427	426	426	429	6 40	449	15 44	417	30
444	442	438	439	437	435	435	435	434	**443**	6 16	464	0 0	430	31
412	**411**	412	414	415	416	418	419	418	420					Mean.
418	**417**	417	417	419	420	422	422	423	426					Mean.†

*See footnote on page B-17.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

NOVEMBER. 37000γ PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	438	441	439	438	443	446	445	443	432	424	416	421	420	418	420
2	428	431	434	447	455	461	465	464	450	444	433	422	430	435	432
3	430	431	439	447	457	463	469	454	443	432	429	436	440	430	429
4	424	429	438	440	445	461	468	468	456	436	423	429	429	415	408
5	423	421	428	436	449	459	457	455	448	447	438	433	425	424	423
6	431	429	425	434	442	454	458	439	431	433	441	438	430	411	388
7	414	415	421	417	420	428	435	435	423	411	404	399	407	404	408
8	416	416	414	423	423	411	409	395	378	369	378	392	406	406	390
9	411	414	423	433	436	440	436	433	433	428	425	417	420	405	406
10	422	424	429	429	423	432	432	425	427	417	419	419	407	395	396
11	422	424	428	429	423	431	431	425	417	417	419	419	407	400	399
12	417	418	418	426	422	425	429	433	426	420	422	418	417	417	415
13	422	421	423	428	438	449	454	451	447	437	430	424	422	420	420
14†	435	434	441	449	459	466	469	458	442	433	430	428	427	429	428
15†	428	431	442	452	469	479	481	472	461	448	441	433	428	425	428
16	439	441	444	448	451	455	459	449	440	427	424	423	422	420	421
17†	429	431	442	455	461	463	466	463	455	444	438	432	434	434	431
18	427	434	441	453	464	**482**	472	461	444	438	437	436	438	444	444
19	433	433	439	450	456	458	459	453	441	426	420	417	423	425	427
20	437	435	436	440	449	451	455	452	451	440	435	429	428	424	425
21	422	428	434	436	440	449	455	454	447	444	436	427	419	413	411
22	429	425	432	445	452	448	462	462	454	445	439	437	433	431	432
23	430	430	436	438	440	447	449	447	441	437	437	437	433	431	431
24†	431	430	433	442	446	449	458	454	448	442	438	433	433	430	426
25	428	429	432	441	444	452	456	459	459	456	452	444	440	437	435
26†	435	434	437	439	439	446	448	448	440	435	440	441	435	433	429
27	429	428	429	433	435	440	445	448	449	451	448	445	438	437	436
28	408	412	417	430	439	448	449	438	420	415	405	397	402	408	403
29	421	426	434	441	448	455	452	443	435	425	425	426	419	409	404
30	421	424	429	434	442	453	456	455	447	441	434	430	427	427	428
Mean . .	426	427	432	438	444	451	**453**	448	439	432	429	426	425	421	419
Mean† . .	431	431	438	447	455	460	**465**	459	449	440	437	433	431	431	428

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1†	428	429	433	436	443	449	441	450	448	442	434	428	422	424	426
2	432	434	439	448	459	466	463	456	452	446	441	436	432	437	438
3	437	443	448	461	469	478	483	478	466	452	436	415	391	384	399
4	421	426	440	446	445	441	438	427	422	417	411	400	377	381	395
5	420	425	432	434	433	442	445	441	431	410	412	408	403	404	403
6	419	421	422	431	426	431	434	432	428	421	424	420	409	416	416
7	424	427	427	430	432	439	442	441	443	441	435	428	423	407	410
8	420	421	420	423	424	429	432	434	431	427	426	423	421	421	437
9	426	428	429	433	437	444	449	448	447	447	452	440	427	428	411
10	404	411	411	410	419	425	441	442	432	428	423	414	412	422	419
11	424	419	423	424	424	428	428	423	420	425	428	427	419	413	411
12	417	418	426	436	442	441	441	436	431	426	426	429	435	431	429
13	434	435	444	447	454	457	464	460	455	449	447	445	435	432	430
14†	431	433	435	442	447	452	457	455	453	447	443	440	440	35	432
15†	435	437	443	449	458	469	474	474	474	466	460	449	445	444	442
16	443	446	450	455	461	476	**484**	480	471	466	459	452	444	441	438
17	429	432	437	441	445	447	455	453	450	441	439	435	428	419	430
18	430	430	437	444	447	453	451	445	441	433	421	421	423	428	427
19	430	431	431	441	447	452	448	442	434	433	432	430	428	431	428
20	427	425	427	428	427	437	447	449	448	448	448	445	440	431	425
21	427	426	427	431	436	440	442	442	439	441	438	432	438	438	436
22	436	438	441	443	443	453	469	471	461	453	446	443	438	435	428
23	431	433	435	436	437	445	455	458	454	455	451	439	432	433	435
24†	429	431	429	430	429	432	437	442	438	447	436	438	438	438	439
25	440	442	444	444	439	444	450	456	462	459	456	454	448	446	442
26	444	444	443	446	448	445	450	458	453	447	443	442	442	444	445
27	435	437	443	446	450	448	452	446	442	436	435	441	441	439	441
28	429	431	436	439	439	447	448	450	444	436	434	437	434	431	430
29	448	435	435	444	440	439	452	452	443	434	433	431	428	426	427
30†	427	430	435	439	444	453	463	463	452	440	434	434	433	433	433
31	440	443	449	461	466	469	473	471	461	449	448	445	442	441	436
Mean . .	430	431	435	439	442	447	**452**	451	446	441	437	433	428	427	427
Mean† . .	434	436	438	442	447	453	457	**459**	454	449	442	438	435	435	434

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

NOVEMBER. 30γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									*Mean.	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
425	425	424	423	428	433	433	430	429	430	5 50	452	9 53	415	1
431	430	428	429	427	439	429	427	427	437	6 10	467	10 39	420	2
426	425	429	431	437	426	423	427	422	436	5 18	465	15 20	419	3
398	407	406	403	411	418	434	429	428	429	6 10	469	15 26	395	4
419	421	428	428	429	422	421	421	427	423	5 22	461	15 0	416	5
394	**354**	371	394	392	393	406	409	408	418	5 40	466	15 50	**340**	6
398	408	417	397	402	416	439	419	415	415	20 48	447	11 2	388	7
404	400	404	403	408	412	428	429	414	**405**	20 56	433	9 16	364	8
402	415	410	420	419	417	429	425	423	422	4 46	441	15 16	398	9
391	406	411	412	418	418	417	419	422	417	5 6	435	14 54	387	10
407	415	400	403	406	405	413	417	413	415	6 56	454	14 3	397	11
419	416	411	413	425	418	421	421	421	421	6 46	434	17 30	409	12
421	419	422	422	421	424	427	432	434	430	5 58	456	16 54	413	13
425	422	424	423	424	424	425	428	429	435	5 38	474	16 14	419	14†
423	417	418	425	429	429	431	433	437	**440**	5 47	485	17 0	416	15†
425	428	427	438	428	427	427	426	427	434	5 54	461	12 30	417	16
429	426	425	424	423	426	426	427	428	438	6 14	469	18 50	422	17†
430	433	425	426	420	422	427	428	431	440	5 18	**486**	19 4	419	18
428	428	422	419	423	416	421	428	430	432	5 26	461	20 4	413	19
425	424	424	425	426	424	433	429	423	434	6 0	456	20 18	421	20
412	423	421	423	429	428	428	426	427	431	5 38	457	14 52	404	21
430	427	424	422	427	432	431	430	429	437	6 32	466	17 18	419	22
430	427	423	421	426	431	430	429	429	434	5 30	450	20 20	415	23
422	423	424	425	423	425	425	426	429	434	5 46	463	16 2	421	24†
429	423	436	430	437	435	432	430	433	440	7 22	461	15 58	422	25
429	429	427	425	426	428	431	439	428	435	5 42	450	17 42	423	26†
439	439	443	425	405	395	405	404	401	431	8 52	452	20 6	392	27
403	409	405	401	411	415	415	415	416	416	5 28	451	11 4	395	28
404	405	410	413	411	416	417	419	419	424	4 58	456	13 46	403	29
430	428	428	427	429	431	435	425	428	434	6 2	456	18 50	421	30
419	**418**	419	419	421	421	425	425	424	429					Mean.
426	**424**	424	425	425	427	428	431	431	437					Mean.†

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427	427	427	425	426	427	429	431	432	433	6 4	452	12 10	419	1†
438	437	435	430	430	430	439	439	441	442	5 10	469	18 40	427	2
406	414	419	417	425	429	424	427	422	434	5 50	**486**	12 56	380	3
409	403	408	411	403	401	411	417	415	415	3 6	447	11 44	368	4
413	402	399	394	400	410	422	423	421	418	5 42	451	18 26	389	5
417	423	422	418	421	424	424	429	426	423	6 12	436	12 14	405	6
419	422	422	422	422	417	417	420	421	426	6 44	445	13 20	403	7
418	420	419	420	424	429	428	426	427	425	6 20	435	13 42	415	8
393	367	**351**	358	363	369	386	404	409	414	9 56	453	16 46	**341**	9
405	396	382	375	382	388	401	415	423	**412**	6 20	453	18 6	372	10
416	412	408	415	420	414	414	415	419	419	4 55	433	16 50	406	11
425	419	411	414	423	430	431	432	436	429	5 30	443	16 42	409	12
427	420	429	427	430	433	433	430	428	439	5 44	467	15 50	417	13
431	430	429	432	429	429	435	435	435	439	5 40	459	19 38	427	14†
440	435	438	444	440	438	440	437	440	**450**	7 36	476	0 0	435	15†
441	442	439	432	429	424	426	426	431	448	6 10	485	19 30	421	16
435	433	432	431	429	427	433	435	429	436	6 0	457	13 3	414	17
431	435	435	430	439	433	431	434	435	435	5 32	457	11 30	420	18
422	428	427	427	428	429	429	427	428	433	4 56	453	14 58	420	19
422	430	431	432	432	432	431	434	430	434	7 16	451	14 54	421	20
438	436	435	432	431	435	427	427	434	435	6 36	443	18 46	425	21
428	434	431	433	433	433	431	437	436	441	6 16	473	14 30	424	22
433	430	429	423	423	424	426	426	431	437	7 0	459	18 42	423	23
439	433	433	434	437	437	441	444	442	437	22 22	447	3 50	427	24†
438	433	422	427	436	436	434	437	444	443	8 4	463	17 10	420	25
440	437	436	438	439	440	438	434	436	443	7 8	461	21 46	432	26
440	434	435	423	414	418	424	426	428	436	6 18	453	19 18	412	27
430	433	433	437	439	437	437	431	427	437	23 44	459	23 0	422	28
428	427	421	423	425	431	429	429	428	433	6 34	457	17 18	421	29
433	433	433	433	433	436	437	437	439	439	6 22	467	0 30	426	30†
435	439	438	432	434	436	436	438	440	447	6 12	478	18 22	431	31
427	425	423	**422**	424	425	427	429	430	433					Mean.
433	**430**	431	432	431	431	433	433	434	439					Mean.†

*See footnote on page B-17a

†Five international quiet days.

VERTICAL FORCE, 1933.

JANUARY. (Averages for period of sixty minutes centred at the full hour of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	848	848	846	849	850	846	837	841	849	848	848	849	845	840	839
2	835	837	836	839	842	838	840	837	834	830	837	843	837	833	834
3	835	835	835	838	844	837	823	819	829	835	839	836	834	835	833
4†	835	835	835	838	836	825	821	827	831	828	831	832	834	835	835
5†	835	835	832	838	836	831	827	830	833	831	827	834	838	833	833
6	834	832	831	835	833	828	823	829	832	827	818	820	827	829	830
7	825	827	824	831	839	835	833	837	844	843	839	835	838	838	840
8	836	836	835	838	839	835	832	836	841	835	831	833	838	837	837
9	839	837	837	844	854	850	843	852	848	836	836	842	842	842	843
10†	839	837	838	843	845	843	841	841	844	841	839	841	839	839	841
11†	834	833	832	838	843	838	835	831	835	832	833	834	833	832	832
12	830	830	833	842	846	839	839	843	845	839	837	834	830	832	834
13	828	826	826	833	833	826	825	822	828	825	828	831	828	824	825
14	819	819	820	823	817	803	801	813	826	830	836	837	838	840	841
15	835	834	838	849	854	847	846	851	854	847	851	852	844	845	848
16	847	848	849	851	835	825	837	843	841	842	844	852	849	845	846
17	849	850	851	854	859	853	852	855	851	846	847	850	850	851	851
18	845	844	845	849	840	817	800	794	811	828	841	848	845	839	839
19	832	832	830	835	834	821	813	817	827	832	833	836	839	833	832
20	825	824	825	830	823	821	819	813	820	829	839	842	840	837	835
21†	828	828	828	834	838	827	821	823	820	823	827	832	831	830	831
22	820	821	822	824	819	802	**784**	787	796	809	824	833	828	825	824
23	815	815	819	828	835	835	818	814	821	824	829	833	836	838	841
24	828	838	842	851	856	838	825	836	848	844	843	848	854	852	853
25	847	848	850	857	858	839	825	828	847	859	857	857	858	858	861
26	852	851	847	854	860	858	854	849	856	860	855	850	851	852	853
27	847	844	846	852	858	853	846	846	855	847	835	833	839	843	844
28	840	838	835	839	843	838	831	835	842	844	840	831	833	835	834
29	831	831	831	832	831	825	818	822	824	821	824	822	820	823	824
30	823	821	819	824	827	819	806	809	818	823	826	823	814	811	813
31	818	817	815	820	816	807	801	800	804	811	815	817	813	811	814
Mean .	834	834	834	839	**840**	832	**826**	828	834	835	836	837	837	836	837
Mean† .	833	832	831	837	**839**	832	**828**	830	832	831	831	835	835	834	835

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1	823	823	824	832	835	828	813	812	818	830	825	829	828	826	826
2	828	827	827	834	831	816	804	**804**	815	822	822	824	823	823	825
3	828	828	831	837	837	824	815	819	832	837	838	835	833	833	832
4	828	827	827	831	837	836	833	841	845	842	834	829	831	835	836
5	835	835	834	837	848	845	845	851	853	842	826	829	839	845	842
6†	838	838	836	836	838	837	837	839	839	837	836	838	835	833	833
7	829	829	829	835	840	834	829	823	825	825	826	825	824	827	830
8	828	827	827	834	833	827	818	822	823	814	812	817	819	827	824
9	830	830	833	837	839	838	837	841	846	848	845	842	838	840	841
10	843	843	843	844	839	833	825	825	830	833	837	839	838	835	841
11†	833	833	830	832	831	827	820	826	832	835	832	831	827	824	827
12	829	829	826	825	821	819	813	814	822	827	827	823	817	815	819
13†	824	825	826	825	817	810	805	817	829	837	841	844	839	835	836
14	841	841	841	839	828	822	823	831	839	844	847	849	845	842	840
15	844	845	845	848	843	839	841	845	853	857	855	849	843	841	841
16†	838	837	838	843	843	831	822	823	831	838	837	838	837	835	835
17†	829	830	833	835	833	823	807	809	819	827	831	831	830	831	831
18	832	834	837	838	829	818	814	818	826	833	837	840	840	838	838
19	837	838	839	839	836	829	828	831	835	837	842	846	841	844	843
20	839	844	842	845	847	846	847	848	854	857	856	853	849	850	848
21	849	850	851	854	849	853	855	857	860	**863**	862	859	853	852	852
22	847	844	846	843	846	845	838	843	849	855	858	857	849	846	848
23	842	841	839	835	823	814	813	818	819	824	835	836	831	829	834
24	833	831	829	826	820	815	817	828	835	844	846	840	834	829	832
25	834	831	831	831	826	825	831	838	843	847	848	840	832	837	840
26	839	840	839	830	820	814	818	824	830	841	848	849	845	837	837
27	839	839	841	840	835	828	824	831	835	841	846	847	843	839	840
28	841	842	843	848	841	833	834	833	830	835	840	843	840	837	838
Mean .	835	835	835	837	835	829	**825**	829	835	838	**839**	839	836	835	836
Mean† .	832	833	833	834	833	825	**818**	823	830	835	836	**836**	834	832	832

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JANUARY. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
839	836	837	837	839	839	837	833	832	842	3 30	853	22 38	830	1
833	832	833	833	832	832	830	832	831	835	11 0	845	8 58	828	2
833	832	832	832	832	832	832	832	831	833	3 38	845	6 30	817	3
835	834	833	833	833	833	832	831	831	832	3 18	840	6 0	821	4†
832	831	830	829	829	829	829	828	828	831	3 36	842	10 0	827	5†
828	828	829	829	828	827	828	827	825	828	3 44	838	10 20	817	6
839	837	839	837	836	835	835	835	835	836	8 0	845	2 0	823	7
837	837	837	838	837	836	836	836	837	836	7 44	842	10 50	829	8
841	841	840	840	840	840	839	839	839	842	7 24	855	9 30	833	9
840	839	839	838	838	837	836	836	836	839	3 58	846	22 42	835	10†
832	831	832	833	833	833	832	831	831	833	4 0	845	1 50	830	11†
833	832	832	832	831	830	829	829	829	835	3 46	849	20 50	829	12
824	822	823	823	822	821	820	819	817	825	3 38	836	23 10	817	13
841	842	842	843	843	843	842	840	838	831	20 6	844	5 50	798	14
848	848	849	848	848	848	846	845	849	847	3 48	857	0 46	833	15
848	848	848	849	849	849	849	849	849	845	11 10	854	4 50	822	16
851	851	850	851	851	850	851	850	849	851	3 56	862	9 2	845	17
839	839	839	839	838	838	838	337	836	834	2 56	849	6 38	789	18
829	828	831	831	831	831	830	829	826	829	11 30	838	5 46	812	19
834	833	834	833	833	833	832	832	831	830	11 10	843	7 6	811	20
831	831	831	830	829	828	827	827	827	828	3 58	839	5 30	819	21†
824	824	822	821	820	822	821	824	821	817	11 10	834	6 20	**781**	22
841	844	845	847	850	850	849	849	846	835	22 24	851	6 30	813	23
855	855	856	855	857	856	856	855	855	849	4 18	859	6 22	824	24
861	860	859	860	855	857	855	855	853	**853**	3 46	**863**	6 30	822	25
853	852	852	851	851	851	848	845	845	852	8 56	863	23 54	841	26
844	842	843	844	843	841	840	837	836	844	4 4	859	10 38	831	27
834	834	836	835	836	835	834	834	833	836	8 24	846	23 43	823	28
824	823	824	825	325	824	823	823	820	824	0 6	834	6 16	816	29
814	814	812	814	813	813	812	813	811	816	4 20	830	6 30	805	30
814	815	816	816	816	816	816	816	816	**813**	3 20	821	6 50	798	31
837	836	836	836	836	836	835	834	834	835					Mean.
835	834	834	833	833	833	833	832	833	833					Mean.†

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826	826	826	826	826	826	826	825	824	825	3 44	837	6 24	810	1
826	828	826	823	826	826	826	825	826	823	3 28	838	6 20	**801**	2
832	832	831	831	831	831	831	831	829	831	3 32	840	6 14	814	3
836	837	837	836	836	838	837	836	836	835	7 50	846	1 46	825	4
842	842	842	842	842	842	841	840	839	841	7 40	854	10 2	823	5
833	833	834	834	834	834	834	833	832	835	7 28	841	12 44	833	6†
829	829	830	829	828	827	827	825	825	828	4 8	843	7 0	821	7
824	825	826	825	825	826	825	825	824	824	3 26	836	9 58	811	8
840	841	841	841	840	838	836	836	836	839	8 48	851	1 0	830	9
837	837	836	836	836	835	835	834	833	836	3 14	845	6 18	823	10
827	826	827	830	829	829	827	827	827	829	9 14	836	5 50	819	11†
820	820	821	821	822	822	822	821	822	**821**	8 54	831	6 10	819	12
837	837	837	837	839	839	839	840	840	832	11 10	845	5 56	831	13†
841	842	844	845	849	844	844	844	844	840	19 14	851	5 12	821	14
843	845	845	843	843	844	844	843	844	845	8 50	860	4 50	837	15
835	836	836	836	836	836	836	837	837	835	3 54	845	6 14	820	16†
831	831	832	833	833	834	833	833	833	829	2 48	837	6 17	804	17†
837	837	838	839	839	839	838	838	838	834	11 14	841	5 58	814	18
841	841	842	843	842	845	840	841	840	839	12 53	849	5 36	827	19
851	851	852	854	854	853	853	852	851	850	9 36	862	0 0	838	20
855	850	854	853	854	855	853	849	852	**854**	8 30	**864**	16 10	843	21
849	848	848	848	849	847	845	843	844	847	10 30	861	6 8	837	22
832	832	834	833	835	834	836	835	835	831	0 4	844	6 10	810	23
834	833	837	839	836	834	835	835	835	832	9 16	849	5 20	812	24
841	841	841	842	843	842	842	839	840	838	10 6	849	4 22	823	25
838	839	840	841	842	842	841	842	841	837	11 0	851	4 56	812	26
842	842	843	845	844	844	843	842	842	840	10 54	849	5 50	822	27
839	839	841	842	841	841	840	840	840	839	3 16	849	7 54	829	28
836	837	837	837	838	837	837	836	836	835					Mean.
833	833	833	834	834	834	834	834	834	832					Mean.†

*The daily mean values of vertical force derived from 24 hourly values, has been corrected for progressive change by 1/48th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

(Average for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MARCH, 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	841	841	843	846	842	839	829	821	817	824	833	832	835	835	835
2	837	839	841	842	838	831	828	828	829	828	829	830	831	834	835
3	842	841	841	843	844	839	830	824	819	824	831	835	835	839	840
4	842	841	841	839	831	830	831	830	828	834	840	836	833	835	836
5†	837	837	839	838	827	822	815	813	819	829	834	836	835	832	832
6†	832	832	834	839	836	825	814	809	821	832	833	833	831	829	830
7†	831	830	832	836	831	837	820	815	819	828	833	831	826	829	831
8	832	833	837	840	840	836	831	829	827	831	833	831	831	831	831
9†	831	831	834	839	836	833	833	829	822	829	829	829	829	830	831
10	835	834	839	842	836	833	831	833	833	838	841	837	831	831	834
11	843	840	847	851	849	845	839	830	831	841	851	853	849	845	844
12	847	848	840	844	842	848	845	844	846	855	858	854	847	841	843
13	842	843	847	849	844	834	835	841	843	851	848	840	836	835	838
14	841	841	846	845	835	831	828	827	832	838	837	832	827	826	828
15	825	824	825	822	815	812	809	806	809	814	817	819	817	817	815
16†	819	819	823	824	816	810	810	810	814	809	824	818	811	811	812
17	815	815	820	821	819	816	813	811	818	829	837	841	839	838	837
18	842	842	847	852	856	852	855	856	858	862	861	854	847	847	850
19	851	849	853	860	856	853	849	848	853	866	873	869	863	858	856
20	351	853	852	845	842	842	839	835	832	841	847	848	847	847	8 7
21	840	839	839	841	840	843	841	833	830	838	843	838	834	832	833
22	831	831	836	831	837	816	802	793	799	813	822	824	823	823	824
23	817	818	820	818	811	805	800	802	802	809	816	817	811	809	812
24	806	805	803	799	796	801	808	807	812	826	832	824	839	839	840
25	843	844	846	846	846	847	841	837	837	842	834	847	831	845	846
26	851	852	856	852	839	831	820	815	821	826	825	828	852	849	850
27	851	852	856	860	859	856	846	840	840	852	856	850	848	836	847
28	851	853	855	852	849	843	837	831	835	844	852	852	849	849	849
29	851	853	855	853	848	839	827	817	824	837	846	848	847	847	845
30	845	846	847	838	826	824	820	818	825	831	837	837	836	837	837
31	841	843	848	846	839	826	810	803	810	822	830	835	832	830	829
Mean .	838	838	840	**840**	836	832	827	**824**	826	834	838	837	836	835	836
Mean† .	830	829	832	**835**	829	825	818	**815**	819	825	831	829	826	827	827

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1	831	832	834	832	831	836	835	829	830	839	846	830	836	839	839
2	848	849	853	849	842	832	823	825	830	844	856	861	859	852	849
3	853	854	858	857	857	851	839	833	837	852	864	865	860	851	852
4	852	852	855	853	847	835	818	821	828	845	856	857	851	844	844
5	846	848	851	845	835	820	814	820	828	841	849	845	837	835	838
6	838	839	836	834	825	813	801	796	798	807	815	818	811	812	815
7	819	821	826	828	820	806	795	796	803	809	810	812	809	809	812
8	814	818	818	809	820	819	809	822	830	838	851	843	857	857	857
9	870	877	879	873	865	850	844	850	858	867	873	874	872	873	874
10	876	879	879	873	866	863	854	846	850	857	865	870	869	869	870
11†	862	865	868	864	856	847	832	828	833	846	857	864	849	857	854
12†	843	845	847	840	825	814	810	815	826	836	843	849	848	846	841
13†	839	845	850	845	834	819	807	809	821	832	838	837	833	834	833
14	833	837	841	832	823	812	805	811	819	824	832	834	831	830	828
15	832	836	836	831	814	804	802	814	832	843	851	854	852	849	848
16	855	861	862	850	838	829	824	830	840	848	854	856	855	855	857
17	859	860	861	858	849	837	828	830	841	850	853	853	852	854	847
18	855	857	854	851	845	839	832	833	841	848	854	858	854	851	851
19	844	847	850	846	836	822	813	819	821	833	839	841	838	835	833
20	827	829	825	822	822	807	799	802	810	818	822	823	822	819	816
21	823	826	826	818	807	802	793	787	793	802	810	816	815	815	813
22	813	816	816	805	793	793	796	801	808	820	826	830	834	834	837
23	843	847	851	849	846	838	834	828	838	846	848	850	851	852	852
24	857	860	862	858	851	839	837	841	847	856	862	865	865	863	863
25	858	861	859	849	841	836	833	835	842	852	856	861	859	856	851
26	847	854	852	835	812	807	811	817	823	828	833	839	841	841	839
27	843	848	845	846	825	827	828	832	835	839	845	852	851	846	845
28†	860	863	866	849	832	830	836	837	838	845	852	857	858	866	865
29†	858	862	860	845	835	834	835	838	846	852	856	855	852	849	851
30	858	862	861	848	826	816	819	824	829	839	845	848	845	843	843
Mean .	845	848	**849**	843	834	826	**820**	822	829	839	845	847	846	845	844
Mean† .	849	853	**856**	846	834	827	**823**	824	832	842	849	852	848	851	850

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MARCH. 17000 γ PLUS TABULAR QUANTITIES

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
835	837	837	838	838	837	837	836	836	835	3 0	847	8 10	816	1
836	837	838	839	839	839	837	837	837	835	2 38	844	6 34	827	2
841	841	841	841	843	841	842	841	841	837	4 4	846	8 8	817	3
836	836	837	838	847	836	836	837	837	836	0 20	842	7 30	828	4
832	833	834	834	834	834	833	832	832	831	3 46	840	6 44	812	5†
830	829	829	830	829	829	829	829	827	829	3 10	840	6 44	808	6†
832	833	834	835	835	835	835	835	834	831	3 0	837	7 10	814	7†
833	833	833	834	834	834	833	833	833	833	3 10	842	7 42	825	8
832	833	833	833	833	833	833	832	833	832	2 50	840	7 50	820	9†
836	837	837	838	838	838	836	837	838	836	3 0	844	12 36	828	10
845	847	846	846	846	845	845	845	844	845	11 0	854	7 0	829	11
845	847	846	845	846	844	843	840	841	846	9 58	860	22 2	838	12
839	837	837	837	837	835	835	835	835	840	9 46	856	5 0	833	13
828	829	829	829	830	829	829	827	827	832	2 34	848	6 54	824	14
816	817	818	819	819	819	818	817	817	817	2 32	826	6 42	805	15
813	815	815	816	816	815	815	813	813	815	2 46	826	5 10	809	16†
837	840	842	843	843	843	843	843	843	832	18 56	844	6 54	811	17
852	851	852	853	853	852	853	853	853	853	9 22	864	1 20	841	18
857	861	859	863	859	864	857	859	856	**858**	9 40	**875**	1 24	843	19
849	851	851	853	848	848	849	848	847	846	1 40	857	7 36	827	20
834	836	837	837	837	837	839	836	837	837	9 36	846	8 0	828	21
826	825	829	827	828	826	825	825	825	822	1 53	838	7 10	**790**	22
816	815	816	816	815	817	815	813	811	**812**	2 24	822	6 6	797	23
843	847	847	851	850	849	848	846	850	829	18 4	853	4 22	795	24
848	849	851	852	852	852	852	852	853	846	23 58	854	7 6	836	25
851	854	856	857	858	857	857	856	855	845	17 14	859	6 54	813	26
852	857	861	860	860	860	857	855	855	853	17 0	863	6 40	838	27
851	854	855	857	857	856	855	855	853	850	18 8	859	7 6	831	28
846	847	849	849	849	848	846	845	842	844	1 38	856	7 4	816	29
838	837	837	837	837	837	836	835	834	835	1 56	849	6 46	816	30
829	831	829	830	830	829	828	826	825	829	2 22	849	6 50	802	31
837	839	839	840	840	839	839	838	837	836					Mean.
828	829	829	830	830	829	829	829	828	827					Mean.†

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839	840	843	843	844	843	842	843	843	838	9 58	848	7 30	825	1
851	853	853	853	854	853	852	850	849	847	11 0	862	6 2	821	2
854	855	857	857	857	858	855	854	853	853	10 42	866	7 8	831	3
846	849	850	851	851	850	848	847	845	846	11 0	859	6 16	814	4
839	842	843	843	842	842	841	849	837	839	1 56	852	5 50	813	5
819	821	822	822	821	820	819	818	819	818	1 30	840	6 46	794	6
814	816	816	817	817	815	816	814	813	**813**	2 40	830	5 54	794	7
860	862	865	865	867	867	868	867	866	845	19 46	869	3 30	795	8
875	877	878	879	877	878	878	877	877	**871**	1 54	881	5 36	843	9
871	871	871	870	868	867	866	865	864	866	1 34	**882**	7 6	845	10
853	855	858	858	857	857	856	855	855	853	1 50	869	7 2	825	11†
841	842	842	842	842	842	841	841	841	838	11 6	850	5 50	810	12†
834	837	837	837	837	837	837	836	835	833	2 0	851	6 24	805	13†
831	833	835	836	835	835	833	834	833	829	15 4	843	6 14	803	14
850	852	855	859	858	859	862	863	856	843	21 30	870	6 0	801	15
857	857	859	859	860	862	860	859	859	852	1 26	865	6 10	823	16
856	855	858	859	859	859	858	858	857	852	0 6	863	6 30	827	17
851	854	854	855	855	854	853	853	851	850	0 56	860	6 12	831	18
834	838	838	839	839	838	837	835	835	835	1 46	852	6 14	811	19
824	824	824	824	825	827	824	823	822	820	1 30	830	6 14	796	20
815	817	833	821	819	820	818	819	819	813	1 20	829	7 0	**787**	21
838	840	843	844	845	845	843	845	845	826	22 16	846	4 34	790	22
852	855	858	859	860	859	861	859	857	850	20 44	863	6 42	826	23
864	868	867	868	867	866	865	865	865	859	16 14	870	5 36	836	24
852	854	855	857	856	856	855	854	853	852	11 4	863	5 50	833	25
839	844	845	845	845	845	845	843	843	836	1 20	857	5 4	807	26
846	848	849	850	849	849	850	849	848	844	11 30	855	4 6	824	27
852	853	854	854	855	854	854	853	852	851	1 48	868	4 24	828	28†
851	852	853	854	856	853	852	852	851	850	1 30	864	4 14	834	29†
843	844	845	849	851	852	853	850	849	843	1 16	864	5 8	814	30
845	847	849	849	849	849	848	848	846	842					Mean.
847	849	850	851	851	851	850	850	850	845					Mean.†

*See footnote on page B-29.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

MAY 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	855	853	851	842	829	819	814	821	825	834	842	843	844	842	852
2	857	859	852	844	839	837	837	836	839	843	849	847	843	842	843
3	848	851	851	847	837	828	826	829	830	836	839	838	832	831	831
4	837	840	839	835	825	811	810	815	825	831	832	829	822	820	826
5	833	838	833	826	819	808	801	806	819	818	831	831	829	826	829
6	825	831	829	812	805	812	825	836	849	858	862	867	867	866	871
7	877	882	885	880	873	869	865	865	869	875	882	885	883	880	880
8	885	891	896	888	867	858	857	858	862	872	873	873	873	871	871
9†	860	864	867	861	841	830	829	835	843	856	862	860	854	853	854
10†	857	862	859	846	829	826	828	837	847	857	863	866	863	856	853
11	856	862	857	843	827	823	823	823	826	838	844	851	853	845	844
12†	856	859	858	853	834	817	822	832	836	842	847	849	851	835	863
13	850	854	859	855	838	825	821	824	829	838	843	848	847	844	843
14	849	849	847	839	826	821	822	826	830	838	842	843	841	841	840
15	843	848	845	840	829	818	816	823	834	845	849	846	842	838	838
16	832	834	831	824	820	815	813	813	817	824	828	828	823	821	819
17	819	822	822	820	809	799	795	797	804	812	815	815	815	813	811
18	811	811	805	790	763	772	790	801	821	837	845	849	851	853	855
19	871	875	878	875	872	863	860	862	867	880	887	885	883	880	874
20	871	875	874	868	855	853	853	857	863	866	866	867	863	861	862
21	864	866	863	858	858	834	833	839	841	849	856	861	862	859	855
22	857	863	868	861	846	836	835	835	837	842	847	853	854	850	847
23	848	852	852	837	816	806	809	813	826	836	844	847	841	834	833
24†	850	854	849	839	823	813	807	804	812	828	837	844	846	841	839
25	855	861	858	847	822	811	809	819	829	837	842	849	862	847	843
26†	861	866	863	854	844	832	829	837	838	841	850	858	857	851	847
27	860	868	864	844	817	805	806	813	820	833	846	855	855	847	842
28	855	860	856	849	831	823	821	817	824	838	842	845	843	841	840
29	847	852	850	843	825	808	809	817	822	830	834	838	838	837	827
30	853	856	850	841	830	816	810	813	819	826	835	838	840	841	843
31	853	859	860	853	836	829	828	829	840	846	844	842	843	842	843
Mean .	851	855	854	846	832	823	823	827	834	842	848	850	849	845	846
Mean† .	856	861	859	850	834	823	823	829	835	845	852	856	854	847	852

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1	843	847	843	832	824	814	816	820	823	830	836	837	834	835	836
2	837	840	837	830	819	808	801	800	810	823	830	834	834	828	829
3	829	828	826	825	822	825	829	835	852	870	882	887	885	880	881
4	891	893	888	881	870	869	867	874	887	893	899	897	890	884	883
5†	893	896	890	876	862	862	864	873	879	886	889	887	883	881	883
6†	885	875	884	869	857	854	865	857	868	877	880	883	877	870	871
7	871	876	870	860	849	843	835	840	849	851	858	869	866	859	854
8	862	863	859	858	852	841	842	847	848	858	865	870	865	859	851
9	865	867	858	848	835	831	832	833	831	838	849	859	856	855	852
10	856	855	844	839	831	826	819	822	840	846	852	854	848	846	839
11	845	849	841	831	817	811	811	820	828	833	833	830	833	826	832
12	834	838	834	829	820	817	814	815	827	835	833	830	827	828	826
13	830	832	833	826	822	816	807	813	820	819	820	825	830	830	826
14	831	831	832	821	797	786	783	783	784	796	809	816	821	820	818
15	820	824	822	814	801	805	813	820	830	835	847	860	868	871	873
16†	883	887	889	882	869	857	853	856	859	867	877	878	875	875	877
17	882	886	881	871	853	841	842	845	853	863	871	875	875	872	868
18†	874	880	881	872	858	851	844	843	847	853	861	865	865	862	860
19	864	866	868	862	845	833	825	834	850	857	855	853	852	850	850
20	855	862	864	862	859	853	849	853	853	845	842	836	838	841	843
21	845	848	847	839	820	806	806	809	817	824	808	840	838	833	830
22	836	842	845	833	809	799	796	793	803	809	820	831	832	824	819
23	826	832	832	816	795	799	814	830	849	858	868	881	888	885	882
24†	897	901	903	893	875	864	865	872	882	891	895	895	895	893	892
25	895	898	899	899	890	885	881	887	893	891	893	896	894	889	889
26	889	894	892	880	870	866	867	873	877	878	879	881	885	883	878
27	872	875	880	880	869	854	846	844	846	852	857	859	863	861	859
28	862	864	861	856	844	839	839	842	850	851	854	859	859	855	855
29	863	865	858	844	823	813	813	818	826	829	832	842	852	849	844
30	849	851	847	835	824	819	820	825	828	831	837	842	844	840	837
Mean .	859	862	860	852	839	833	832	836	844	850	854	859	859	856	855
Mean† .	883	885	887	876	862	855	857	859	866	874	880	881	879	876	877

†Five international quiet days.

MAY. (Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.) 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
853	849	854	848	857	860	855	854	853	844	19 58	868	5 54	810	1
844	844	845	846	844	845	844	843	843	844	0 46	864	6 46	835	2
832	835	835	837	835	835	835	833	834	836	1 36	854	5 40	824	3
827	829	829	832	831	831	831	831	832	828	1 0	841	5 16	809	4
830	831	834	835	835	835	835	834	831	827	0 52	839	6 4	800	5
868	871	873	873	873	874	875	875	875	854	21 20	877	3 40	802	6
882	882	883	883	884	883	883	884	884	879	1 30	887	6 12	863	7
870	871	870	869	869	867	866	866	866	871	1 52	897	4 58	857	8
855	858	859	859	859	859	858	857	858	854	2 0	869	5 36	828	9†
853	854	856	856	855	855	854	853	853	852	11 8	867	5 10	826	10†
844	846	847	847	847	845	845	844	845	843	1 6	863	7 24	823	11
834	834	835	850	849	849	848	847	846	843	1 16	860	5 14	815	12†
845	847	849	849	849	848	846	846	845	843	2 20	860	5 54	820	13
841	842	843	845	845	846	847	844	842	839	1 22	850	5 24	819	14
838	840	841	841	840	840	841	839	849	838	10 18	851	5 10	815	15
822	824	824	827	835	824	825	824	823	823	1 8	835	6 30	812	16
813	812	814	815	815	816	816	816	816	812	1 14	826	6 26	794	17
859	862	864	867	867	868	868	869	869	837	22 20	872	4 4	759	18
873	875	877	877	827	877	877	876	875	875	10 4	888	5 30	856	19
862	864	866	865	864	864	865	865	864	864	1 2	877	5 30	852	20
855	856	856	857	858	856	857	857	857	854	1 2	870	5 16	830	21
847	848	849	850	849	849	849	847	847	848	1 58	869	6 0	834	22
836	838	837	838	839	838	837	836	837	835	0 48	854	5 0	805	23
841	844	844	845	844	844	844	843	843	837	0 50	855	7 16	803	24†
848	849	851	852	852	852	851	851	850	844	1 4	861	5 50	807	25
851	852	853	852	852	852	852	851	851	850	0 58	867	5 30	828	26†
845	847	850	850	850	848	849	848	848	842	1 6	870	5 30	803	27
842	843	843	844	843	843	842	841	841	840	0 58	863	6 48	816	28
839	840	841	843	844	843	842	839	839	835	1 4	854	5 20	805	29
844	847	851	850	852	851	851	850	850	840	0 30	857	6 32	807	30
840	845	847	848	848	849	847	847	845	844	1 14	861	6 24	825	31
846	848	849	850	850	850	849	849	849	844					Mean.
847	849	850	853	852	852	851	851	851	847					Mean.†

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837	840	838	839	839	837	839	839	838	834	1 10	848	5 14	811	1
830	831	832	831	833	833	832	831	831	827	1 6	842	6 52	798	2
887	886	888	890	890	891	891	891	891	866	23 50	894	4 24	820	3
886	886	888	888	889	889	891	890	891	886	10 20	901	5 56	866	4
884	885	883	884	884	884	882	883	885	881	0 46	897	5 40	861	5†
872	873	875	875	874	874	874	874	874	872	0 56	891	5 56	851	6†
856	858	859	858	859	859	859	858	860	757	0 54	878	6 18	833	7
854	856	857	859	859	855	856	855	855	856	10 44	872	4 54	839	8
853	854	855	855	855	854	853	852	852	849	0 38	871	4 40	829	9
843	845	845	844	845	844	843	843	842	842	0 30	859	6 30	817	10
834	835	837	837	837	837	837	836	836	832	0 46	851	5 30	810	11
827	828	830	830	831	832	833	833	832	828	1 6	838	6 19	813	12
831	832	831	831	834	834	834	832	832	827	22 42	839	5 58	801	13
819	820	822	823	822	822	823	822	821	813	1 42	835	6 32	781	14
875	878	882	883	884	884	885	885	884	853	21 8	886	4 10	801	15
877	878	879	880	879	879	879	878	878	875	1 34	889	5 52	853	16†
870	871	873	873	873	873	873	871	870	867	0 48	887	5 26	840	17
862	862	862	862	861	860	860	860	860	861	1 40	883	6 48	841	18†
850	853	853	856	856	856	856	853	851	852	1 40	869	5 46	823	19
845	844	844	845	845	845	845	843	842	848	1 24	866	11 31	834	20
832	835	836	836	836	835	835	835	834	830	1 30	849	5 10	803	21
822	826	825	825	824	823	824	823	822	821	1 56	845	6 50	791	22
886	889	891	891	891	891	891	892	893	863	23 38	895	4 30	794	23
894	897	897	897	897	897	898	896	896	891	1 36	904	5 14	863	24†
892	894	895	895	893	893	889	891	890	892	1 22	901	6 4	886	25
878	879	878	878	876	876	875	875	874	878	1 10	897	5 2	864	26
859	861	863	864	863	862	862	861	859	861	2 28	882	6 36	842	27
853	853	852	854	855	855	853	853	854	853	0 26	866	5 50	835	28
843	843	844	846	846	845	845	843	843	840	0 44	868	5 30	808	29
835	836	837	839	838	839	838	837	836	836	0 54	852	5 10	818	30
856	858	858	859	859	859	859	858	857	853					Mean.
879	880	881	881	881	881	881	881	882	876					Mean.†

*See footnote on page B-29.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JULY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	839	844	847	842	831	830	827	822	831	843	856	857	855	850	852
2	864	869	869	865	857	850	836	839	853	868	869	866	866	862	861
3	871	875	881	880	869	856	838	836	851	861	867	870	869	868	865
4	875	880	881	879	863	855	845	845	852	864	873	873	868	864	863
5	867	873	873	863	851	837	822	832	847	851	861	862	857	856	856
6	861	866	862	854	843	835	835	838	840	841	844	851	854	853	850
7	853	860	860	851	831	828	821	823	831	837	848	851	846	840	840
8	839	846	845	836	821	805	799	804	813	816	826	833	836	835	831
9	830	833	831	826	815	815	813	812	808	815	826	833	831	826	821
10	820	827	822	813	804	811	823	827	839	855	861	864	868	868	867
11	871	876	874	867	857	845	843	850	860	868	876	879	879	872	870
12	871	875	873	862	849	835	824	826	839	849	853	861	868	871	867
12†	870	873	870	863	851	849	850	857	867	876	879	879	874	867	864
14†	869	873	877	873	860	853	841	835	842	849	857	859	861	858	857
15†	866	870	871	864	856	853	840	836	848	860	870	877	873	864	857
16	866	871	870	859	833	817	813	821	831	840	837	837	840	845	844
17	856	861	859	855	847	842	840	837	837	842	847	850	851	848	845
18	854	859	854	846	825	821	831	836	835	842	844	846	842	839	838
19	840	846	845	832	814	825	828	819	825	835	842	844	843	836	834
20	836	840	834	826	804	793	796	795	797	801	813	826	827	822	821
21†	824	832	823	808	792	790	796	810	828	843	857	868	870	865	861
22	873	878	875	866	852	844	839	842	859	868	863	866	868	867	865
23	872	878	873	863	864	840	840	849	859	870	875	877	869	866	869
24	879	885	879	865	845	837	839	845	856	863	872	875	876	874	871
25	873	876	875	873	866	867	866	857	856	866	877	881	872	861	870
26	870	874	879	871	856	839	827	831	843	851	856	858	860	860	859
27	865	871	869	864	847	833	831	832	834	842	855	864	865	858	851
28	856	860	859	855	837	817	806	802	812	822	831	839	843	846	845
29	851	856	858	848	832	817	824	847	851	851	859	866	863	860	856
30†	867	873	875	873	861	843	843	851	860	858	862	871	873	870	866
31	871	876	877	868	849	852	859	855	866	860	879	881	882	873	864
Mean . .	859	864	863	855	841	833	830	833	841	849	856	860	860	856	854
Mean† . .	864	869	868	860	847	840	836	839	851	858	866	872	871	864	860

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1†	872	876	873	870	855	845	841	846	859	864	867	870	867	861	857
2	865	868	863	857	840	833	828	835	838	842	850	856	854	850	847
3	852	857	853	842	827	829	837	841	854	860	860	851	844	841	840
4	853	857	852	841	830	833	838	838	840	843	850	847	843	842	841
5	853	854	853	847	838	831	831	837	831	839	847	847	845	855	853
6	865	867	856	851	842	842	844	842	839	844	856	865	865	861	855
7	861	866	863	854	844	835	834	839	846	854	859	861	856	851	849
8	856	862	864	852	830	815	809	813	827	838	844	851	854	851	847
9†	850	855	857	845	818	805	811	822	834	838	843	849	851	850	846
10†	846	852	856	854	841	831	829	831	833	842	852	859	849	861	860
11†	863	869	868	860	849	841	839	842	851	856	858	865	864	861	858
12	863	867	872	871	865	864	848	853	854	853	858	860	858	857	857
13	863	867	867	860	846	839	838	839	845	848	854	860	860	860	858
14	865	870	870	865	852	841	834	837	841	846	855	860	861	855	855
15	860	864	867	864	851	840	839	847	854	851	852	853	856	854	852
16	860	865	866	858	857	838	836	843	853	854	853	853	849	847	847
17	855	858	857	852	840	833	835	835	843	843	845	843	841	841	841
18	845	852	845	836	821	812	804	812	828	840	843	842	839	833	833
19	849	854	849	836	826	830	838	842	850	857	859	862	864	855	853
20	867	871	867	859	853	850	849	851	854	857	865	859	875	870	865
21	873	875	870	858	845	845	849	852	863	869	869	871	871	870	867
22	869	874	876	863	853	850	855	858	865	875	881	882	877	868	866
23	865	871	867	852	830	817	816	823	837	846	854	862	860	857	858
24	860	864	864	851	837	834	836	840	844	852	855	861	859	853	853
25	857	867	862	838	813	811	815	819	833	847	856	863	867	865	863
26	870	877	881	873	854	847	847	852	858	865	873	881	878	870	865
27	877	884	883	869	850	837	836	851	864	872	881	885	882	874	872
28	877	882	878	869	859	848	849	851	857	865	873	877	878	876	871
29	874	876	871	849	829	827	829	829	835	844	854	861	863	861	861
30	862	865	863	855	851	845	839	847	852	853	855	858	856	851	852
31†	856	859	858	849	842	835	829	829	834	835	845	847	845	841	841
Mean . .	861	866	864	855	841	835	834	839	846	851	857	860	859	856	854
Mean† . .	857	862	863	855	840	831	829	833	842	847	853	858	855	855	853

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

JULY. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
854	856	857	860	861	861	860	860	859	849	19 18	862	7 2	821	1
864	865	866	867	866	866	866	868	867	862	1 18	871	6 18	834	2
867	869	869	871	871	870	869	869	869	866	2 40	883	6 46	831	3
865	866	868	868	869	869	867	867	867	866	2 28	883	6 30	841	4
859	860	861	862	861	861	861	859	860	856	1 20	876	6 40	821	5
852	853	854	854	854	854	853	852	852	850	1 4	867	5 20	832	6
841	842	843	845	845	844	843	841	840	842	1 22	862	6 24	819	7
830	832	833	834	833	834	834	835	835	828	1 18	848	6 8	798	8
822	823	823	826	823	823	822	822	822	822	0 42	835	8 14	794	9
868	870	873	876	875	875	875	873	875	852	18 16	878	3 48	803	10
872	871	873	873	874	875	875	873	873	869	11 48	881	5 30	840	11
867	868	869	871	871	871	871	872	872	861	1 12	877	6 24	822	12
866	867	867	867	867	867	868	867	867	866	9 48	881	4 30	846	13†
858	859	860	860	860	860	860	859	859	858	1 58	878	6 46	833	14†
859	861	861	861	861	861	861	860	859	860	1 20	873	6 52	835	15†
845	848	850	851	851	851	849	848	849	844	1 16	873	5 52	812	16
843	846	848	848	848	847	848	848	845	847	1 6	862	7 26	835	17
840	841	841	840	831	841	842	841	839	840	1 0	862	4 36	816	18
833	833	833	833	833	833	832	833	834	833	1 20	849	4 0	812	19
823	823	823	824	824	823	823	823	824	818	1 0	841	5 0	793	20
865	866	869	870	871	872	872	873	874	847	23 56	877	5 4	789	21†
865	868	870	870	870	871	870	870	871	865	1 16	879	6 20	835	22
867	871	874	874	876	876	879	880	880	869	21 48	887	5 40	838	23
875	874	874	875	875	875	875	874	875	868	1 16	887	4 52	837	24
871	871	872	872	872	872	872	870	869	870	10 52	883	7 36	853	25
863	863	863	863	864	863	863	863	862	858	2 6	880	6 24	825	26
851	853	855	855	856	855	854	853	849	852	0 52	873	5 30	830	27
846	845	845	845	844	845	845	844	843	839	1 16	862	6 42	800	28
859	860	861	863	863	863	863	864	864	854	11 18	868	5 24	810	29
865	866	867	868	868	868	868	868	869	865	2 2	877	5 20	841	30†
866	868	867	867	868	868	867	867	867	867	11 52	883	4 14	847	31
855	857	858	859	858	859	858	858	858	853					Mean.
861	862	863	863	863	862	862	862	861	859					Mean.†

AUGUST.

859	859	860	860	860	860	860	860	861	861	1 0	878	5 44	840	1†
849	850	850	850	850	851	850	849	849	849	1 0	869	5 50	825	2
841	843	844	844	843	842	842	842	842	845	9 16	862	4 12	825	3
842	844	845	846	845	843	844	845	846	844	1 24	858	4 24	827	4
852	855	860	865	854	861	862	860	861	850	17 38	873	5 30	825	5
856	857	858	857	858	858	857	857	857	854	1 16	870	8 30	837	6
851	850	851	853	853	853	852	851	852	851	1 3	868	5 26	832	7
846	849	850	850	850	850	850	851	851	844	1 44	866	6 10	806	8
845	847	848	849	850	850	849	848	847	842	1 52	858	4 56	802	9†
859	860	861	862	863	863	863	862	862	852	19 6	864	5 50	828	10†
859	861	863	865	865	864	865	864	863	859	1 6	871	5 48	837	11†
858	859	853	861	861	861	861	861	861	859	2 28	873	5 50	847	12
859	859	862	860	862	861	863	860	860	856	1 30	868	6 0	836	13
853	853	855	855	856	858	858	857	857	854	1 36	874	6 0	832	14
853	853	854	855	854	856	856	856	856	854	1 44	867	5 22	837	15
849	850	851	851	851	851	851	850	851	851	1 48	867	5 56	835	16
841	841	843	843	843	843	842	842	843	843	1 30	859	5 4	831	17
836	836	838	837	838	839	839	838	838	835	1 4	853	5 36	803	18
857	859	862	863	864	864	864	864	865	854	12 10	866	4 16	825	19
866	866	869	873	871	871	872	871	872	865	11 40	877	5 32	849	20
870	871	870	870	870	870	870	870	870	866	12 36	878	4 36	843	21
866	867	867	867	867	869	868	868	867	867	10 8	883	4 52	849	22
856	858	861	862	860	862	861	861	861	852	1 2	873	5 24	814	23
853	857	855	857	857	856	855	855	855	852	1 34	868	5 4	834	24
865	866	867	867	867	867	868	868	868	854	1 8	870	4 44	810	25
869	871	874	875	875	875	875	875	876	869	1 44	884	5 20	844	26
874	875	876	877	877	878	878	879	878	871	1 10	887	5 52	834	27
872	874	875	875	877	877	877	876	876	870	1 12	883	5 20	845	28
861	862	863	864	865	865	865	865	865	855	1 12	878	5 4	826	29
854	855	857	857	856	857	857	856	856	854	1 4	867	6 2	837	30
842	842	843	845	846	845	845	845	845	843	1 30	861	6 44	827	31†
855	856	857	859	858	859	859	858	859	854					Mean.
853	854	855	857	857	859	857	856	856	851					Mean.†

*See footnote on page B-29.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	844	849	841	828	818	822	827	843	855	865	869	866	859	856	860
2	876	883	885	868	842	841	845	855	867	873	876	876	872	868	870
3†	880	881	881	867	858	861	861	870	874	878	884	887	884	876	875
4	883	887	881	867	851	846	843	849	871	878	881	879	875	875	875
5†	872	877	879	872	856	840	827	836	845	857	862	866	866	864	862
6†	872	881	882	869	845	828	823	829	837	851	862	868	865	862	862
7	865	869	873	864	844	834	828	827	835	852	860	866	862	855	853
8	859	862	861	845	825	820	818	821	834	841	845	848	849	847	847
9	852	855	853	844	829	817	817	824	833	849	857	853	847	847	851
10	852	855	854	849	837	831	830	831	836	847	851	851	843	837	839
11	835	836	840	833	813	812	819	821	821	826	831	835	831	824	823
12	820	822	832	825	812	812	813	816	826	835	844	851	853	853	854
13	865	868	872	866	856	841	838	843	857	870	879	881	878	870	867
14	869	877	876	866	859	856	848	847	857	870	874	877	871	865	866
15	869	876	874	865	852	846	845	844	856	864	870	871	867	865	860
16	858	862	861	849	828	820	825	830	838	853	858	855	849	845	847
17	849	854	856	850	826	817	805	805	817	837	848	850	842	833	836
18	839	846	847	834	809	791	780	798	817	836	847	851	847	842	844
19	855	858	860	853	840	835	832	835	845	853	864	860	855	856	859
20	862	869	870	861	861	857	848	846	852	863	870	871	865	861	862
21	866	871	877	869	851	844	845	847	855	866	870	872	865	865	866
22	865	869	874	864	847	843	841	844	852	863	867	869	868	865	864
23†	867	871	875	869	851	834	825	826	836	851	865	870	868	865	864
24†	864	867	874	867	843	828	820	825	835	855	858	857	853	854	854
25	859	864	865	853	833	821	821	828	839	854	861	864	861	857	854
26	853	856	859	853	844	833	827	824	831	846	856	855	850	848	849
27	851	855	858	846	825	803	795	799	809	823	839	844	844	841	840
28	848	853	850	841	820	800	787	793	805	818	826	830	832	834	833
29	833	836	841	837	823	821	817	820	830	842	846	850	852	853	852
30	850	854	860	858	852	854	851	849	856	862	865	859	852	851	852
Mean . .	858	862	864	854	838	830	827	831	841	853	859	861	857	855	855
Mean† . .	870	875	878	868	850	837	830	837	845	858	866	870	867	864	864

OCTOBER.

1†	852	860	860	852	841	838	837	841	849	855	855	848	843	847	850
2	853	853	855	852	848	841	834	839	844	851	857	854	846	846	847
3	854	855	859	857	847	834	826	821	831	843	849	851	846	846	847
4	849	852	853	849	838	833	831	834	842	848	852	853	849	843	846
5	853	854	857	850	838	833	826	826	832	841	848	853	843	844	847
6	853	856	857	849	833	824	821	827	840	853	855	853	853	846	848
7	855	857	858	855	849	839	840	844	848	853	855	855	851	855	856
8	859	863	865	862	853	846	840	838	844	851	857	855	852	852	853
9	857	859	863	854	834	827	826	835	847	857	859	858	853	851	852
10	851	853	857	859	839	836	829	828	833	841	836	837	845	847	848
11	841	841	845	843	826	817	808	811	814	822	828	833	833	833	832
12	828	827	827	828	818	801	793	800	812	821	828	829	827	821	821
13	815	815	820	816	806	803	810	835	850	857	860	863	865	864	866
14	863	867	872	874	863	858	854	861	871	873	873	871	861	861	863
15	865	867	867	863	860	859	856	858	870	875	876	872	868	869	869
16†	870	870	875	871	859	852	858	863	870	873	871	869	866	866	868
17	860	861	867	865	855	852	854	860	863	862	860	859	858	860	862
18	859	864	869	865	859	851	851	859	871	874	872	867	862	866	869
19	863	864	869	869	861	858	855	860	864	870	869	860	854	855	859
20	853	853	851	841	828	824	816	827	839	814	848	846	841	840	844
21†	845	844	846	845	840	833	828	835	844	851	863	849	842	844	845
22	845	845	847	843	830	828	826	839	851	863	969	869	868	871	874
23	882	882	886	886	875	867	867	871	878	879	881	883	881	881	881
24	884	885	886	882	877	865	862	874	884	886	884	882	883	883	883
25	878	876	880	882	881	878	874	873	871	871	870	872	873	873	874
26	873	873	875	873	871	868	867	872	873	877	881	884	880	880	880
27	879	881	887	887	874	868	863	865	869	870	873	875	874	874	875
28†	870	871	870	867	864	861	864	868	869	872	876	877	872	873	875
29	870	871	874	870	865	860	863	869	875	875	874	871	871	874	874
30†	867	868	870	864	855	853	857	863	867	870	871	869	864	866	867
31	858	858	860	857	854	851	855	864	867	867	863	861	857	861	861
Mean . .	858	860	862	859	850	844	842	847	854	859	862	861	857	858	859
Mean† . .	860	862	864	860	853	848	849	854	861	865	868	863	859	861	863

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
863	866	867	868	869	869	870	871	873	856	10 16	870	3 40	816	1
873	877	877	877	878	878	879	878	878	871	2 0	886	4 30	838	2
877	879	879	881	881	881	881	881	881	**877**	10 54	888	3 44	858	3†
874	877	878	878	878	878	878	878	877	872	1 22	**880**	6 2	842	4
863	865	866	867	867	867	868	867	866	861	1 40	880	5 54	826	5†
863	865	864	867	867	867	867	866	866	859	1 38	885	5 58	821	6†
854	856	857	857	858	858	859	859	859	854	1 50	874	6 54	826	7
848	850	851	852	853	853	854	856	856	846	1 50	863	6 30	816	8
848	851	851	851	850	852	851	852	854	845	10 4	862	5 20	813	9
837	838	838	837	839	839	839	838	836	841	1 22	858	6 24	827	10
824	825	824	825	824	824	824	823	822	**825**	2 6	841	4 36	809	11
855	854	856	860	861	862	863	864	865	843	23 40	866	4 22	808	12
871	866	866	867	868	870	872	871	870	865	11 4	882	6 16	838	13
865	867	868	870	865	864	864	867	868	866	1 22	881	6 20	846	14
860	863	863	864	864	865	865	864	865	862	1 26	880	6 6	837	15
847	847	847	848	848	848	847	850	849	846	1 46	864	5 22	818	16
836	838	839	839	841	840	842	839	839	836	1 38	859	6 34	799	17
845	847	848	849	850	851	851	851	851	837	10 42	854	5 52	**777**	18
860	860	861	862	862	862	862	862	862	855	11 0	865	6 22	830	19
863	864	864	864	863	864	863	863	863	862	1 48	873	6 30	843	20
866	866	867	867	867	867	866	866	866	864	2 12	878	5 12	842	21
865	864	864	865	865	865	865	864	865	861	1 56	876	6 10	840	22
864	865	865	865	865	865	864	863	861	859	2 12	876	6 40	822	23†
856	855	856	858	858	858	858	857	857	853	2 0	876	5 50	820	24†
854	857	858	859	858	859	861	859	858	852	1 44	868	5 24	819	25
850	851	851	852	851	851	851	851	852	848	1 46	860	6 42	823	26
842	844	845	846	847	845	846	845	845	836	2 0	860	6 12	792	27
833	833	832	832	833	833	831	831	829	827	1 50	855	6 0	784	28
853	856	857	859	859	859	859	858	859	845	18 14	861	6 10	816	29
853	856	855	856	852	856	856	856	855	855	9 50	866	6 46	848	30
855	857	857	858	858	858	858	858	858	853					Mean.
865	866	867	868	868	868	868	867	867	862					Mean.†

OCTOBER.

852	852	852	853	854	853	853	854	853	850	1 38	862	6 0	836	1†
849	850	850	851	851	851	850	849	849	849	10 18	857	6 0	833	2
848	849	850	851	851	851	850	849	849	846	2 10	859	7 20	820	3
846	847	847	849	849	849	848	847	847	846	11 8	854	5 24	830	4
848	850	851	850	850	850	849	851	849	845	1 20	858	6 24	824	5
850	841	852	853	853	853	853	852	852	847	1 56	859	6 0	819	6
856	858	858	855	856	855	855	855	855	853	16 28	861	5 8	838	7
854	854	855	855	854	853	852	853	852	853	1 44	867	7 6	837	8
852	853	852	853	849	851	850	848	846	849	1 50	865	5 32	824	9
849	848	851	849	846	845	845	845	845	844	2 40	860	6 24	827	10
834	834	835	836	835	835	834	834	832	830	2 24	847	6 10	806	11
822	823	824	824	824	823	823	821	822	**820**	1 58	835	5 46	**791**	12
868	867	872	873	876	876	876	875	875	851	20 50	877	4 34	802	13
865	866	868	866	869	867	868	869	869	866	10 50	877	5 50	854	14
870	872	873	874	873	874	875	874	874	869	9 24	877	6 16	853	15
869	869	870	871	870	870	870	870	870	868	2 20	877	5 6	851	16†
863	863	864	865	866	865	864	864	865	862	2 20	870	5 10	853	17
869	869	871	871	870	871	871	870	869	866	9 10	876	5 42	844	18
860	860	860	860	859	858	858	857	856	861	2 22	871	12 12	852	19
845	846	847	847	847	846	846	845	842	840	1 30	854	5 52	814	20
846	847	847	848	848	847	846	845	846	845	9 58	855	5 52	825	21
876	876	879	881	882	883	883	883	883	863	21 12	884	5 54	823	22
883	883	884	885	886	885	884	884	884	881	2 38	888	5 20	866	23
883	886	884	886	**887**	886	886	885	885	**882**	15 56	**889**	5 28	861	24
875	876	876	877	877	879	879	879	879	876	2 56	884	10 10	869	25
880	881	882	882	882	882	882	883	883	881	878	10 50	885	5 46	865	26
875	875	875	876	877	877	877	877	877	875	3 2	888	5 58	862	27
875	875	876	876	876	876	876	876	876	872	10 24	878	5 16	861	28†
874	873	873	874	873	873	872	872	872	871	2 12	876	4 46	860	29†
867	867	867	867	867	866	865	865	864	865	1 44	871	4 30	851	30
861	861	861	861	859	859	858	857	857		8 42	868	5 0	850	31
860	860	861	862	862	862	861	861	860	857					Mean.
863	864	864	865	865	865	865	864	865	861					Mean.†

* See footnote on page B-29.

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.)

NOVEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	857	859	855	849	839	825	821	832	840	849	855	855	849	853	852
2	847	848	847	844	836	824	821	829	842	849	847	847	843	845	847
3	840	840	839	841	838	834	829	835	838	839	837	836	836	838	836
4	828	830	833	836	825	819	819	828	835	834	831	835	838	842	840
5	844	844	847	848	848	849	848	850	852	851	853	852	849	850	849
6	848	848	850	850	843	838	844	853	858	857	854	857	854	852	854
7	857	857	862	863	857	855	850	852	853	853	854	863	857	855	859
8	857	859	862	858	856	854	848	853	855	857	855	855	856	860	865
9	861	861	862	863	849	845	844	849	855	857	855	857	861	857	858
10	862	863	863	859	849	848	850	852	859	860	857	862	865	863	860
11	872	872	873	877	875	863	866	865	871	874	871	870	870	868	864
12	865	867	866	865	865	860	859	867	870	859	855	857	858	858	858
13	858	859	858	859	856	849	846	849	852	853	847	848	846	846	847
14†	855	855	854	851	844	841	839	839	842	845	845	847	847	845	846
15†	846	845	848	850	847	843	838	841	841	840	839	838	837	839	839
16	840	839	841	842	834	830	827	829	827	822	825	828	827	829	830
17†	821	819	817	825	825	818	815	822	824	822	822	822	823	824	826
18	824	825	824	824	**816**	816	829	843	853	859	866	873	877	877	879
19	884	884	884	889	887	880	879	884	889	882	881	881	882	883	884
20	879	876	873	882	**891**	887	875	878	885	882	880	873	872	872	873
21	873	873	876	876	867	858	859	865	868	866	867	871	870	868	868
22§	868	868	864	869	871	..	..	..	..	..	..	..	..	..	..
23	842	841	840	848	847	842	835	840	849	850	846	846	847	848	847
24†	847	846	845	848	847	844	840	844	848	847	849	848	847	846	846
25	845	843	846	848	852	847	843	844	847	843	841	840	839	836	837
26†	832	831	829	832	828	824	823	825	829	829	831	831	830	829	829
27	833	832	832	831	827	821	816	825	831	834	831	832	832	831	831
28	832	835	833	840	847	841	839	845	849	855	853	844	837	839	842
29	835	835	832	841	851	852	851	849	847	846	845	846	850	850	851
30	852	852	849	853	855	853	852	859	867	869	862	858	860	860	859
Mean§ .	849	850	850	**851**	848	843	**842**	846	851	851	850	851	850	851	851
Mean† .	839	838	837	**840**	837	833	**830**	833	836	837	837	837	836	837	837

DECEMBER.

1†	856	857	859	861	864	859	858	862	866	867	865	866	866	866	866
2	870	868	869	874	877	872	869	872	876	881	881	876	873	873	873
3	871	872	871	870	871	868	871	878	886	887	884	876	876	870	872
4	866	864	863	867	864	857	853	861	872	872	867	859	859	852	856
5	857	857	855	859	863	859	858	857	862	865	865	864	859	857	858
6	853	852	854	859	858	852	848	854	859	863	862	855	851	851	850
7	841	841	845	847	840	833	829	833	838	842	842	840	838	840	835
8	831	831	834	839	834	826	821	821	825	825	827	831	833	831	830
9	817	818	820	822	823	826	830	846	859	857	880	886	886	885	888
10	892	894	895	899	898	897	895	900	902	904	908	910	904	900	899
11	893	894	891	893	894	895	895	894	896	896	897	898	896	892	891
12	874	873	871	874	875	871	867	871	876	873	873	873	870	872	871
13	862	862	862	865	867	862	861	867	873	873	868	868	870	871	870
14†	872	873	873	876	877	872	872	871	872	870	866	871	873	875	875
15†	890	891	890	895	899	895	887	889	893	896	899	899	895	895	896
16	903	903	902	907	907	903	905	909	910	**913**	912	907	903	904	904
17	906	906	907	910	911	898	889	**888**	887	877	872	866	859	859	856
18	840	839	836	839	840	838	839	841	841	838	830	824	824	827	825
19	823	822	820	824	820	809	**800**	804	816	820	825	827	826	832	837
20	866	867	868	869	863	844	836	845	855	861	865	869	868	866	865
21	869	869	871	872	877	863	859	863	865	868	868	869	868	868	868
22	861	862	864	870	871	865	855	849	857	859	863	869	866	863	862
23	856	856	857	862	861	849	837	837	841	853	861	864	861	860	859
24†	861	862	865	872	882	878	857	847	856	864	872	877	879	878	878
25	879	882	889	892	888	875	868	865	867	871	882	889	884	881	883
26	881	882	882	889	899	894	876	872	880	880	887	878	888	885	885
27	880	883	884	896	901	894	879	863	860	873	886	889	889	887	886
28	877	879	877	881	882	876	876	872	873	875	878	883	884	881	881
29	870	869	875	876	884	869	875	866	854	844	857	866	867	867	868
30†	862	861	860	863	869	860	840	838	860	864	867	869	863	862	863
31	856	857	854	860	866	857	849	849	853	854	861	864	861	861	861
Mean .	866	866	867	870	**872**	865	**860**	861	865	867	870	870	869	868	868
Mean† .	874	874	874	878	**883**	876	865	**863**	871	874	875	877	875	875	875

†Five international quiet days.

§Curve faulty. The day has been omitted for means; mean of 29 days.

NOVEMBER. (Averages for periods of sixty minutes centred at the full hour of Greenwich mean time.) 37000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
852	853	853	853	852	852	852	851	849	848	1 20	858	5 50	820	1
847	847	848	849	846	846	845	843	843	843	10 44	853	5 30	819	2
837	837	836	837	835	833	832	833	832	836	3 22	843	5 58	828	3
842	840	844	844	843	843	842	841	841	836	14 40	846	5 40	817	4
850	851	851	850	850	849	849	847	845	849	10 50	854	22 50	843	5
852	850	856	852	853	855	853	853	852	852	17 24	860	5 18	836	6
857	857	857	856	856	855	855	857	856	856	11 8	868	20 44	848	7
855	858	857	858	857	856	855	856	856	856	14 12	867	6 12	847	8
858	855	856	857	855	855	853	856	855	856	2 30	864	5 30	841	9
859	859	861	861	861	861	861	860	860	859	12 0	868	5 16	847	10
864	864	864	863	863	862	859	859	859	867	2 52	880	20 50	859	11
859	857	856	855	854	853	853	853	852	859	7 50	874	23 30	851	12
847	846	846	846	847	846	845	844	843	849	3 35	862	23 12	843	13
846	845	846	846	845	845	843	842	842	845	0 40	856	5 18	836	14†
839	839	838	838	839	837	836	837	836	840	3 22	854	22 18	835	15†
831	832	831	831	829	827	827	826	825	830	3 0	843	9 2	821	16
825	827	829	830	828	827	827	825	823	**824**	18 38	830	1 36	813	17†
881	882	887	887	887	885	884	884	883	861	17 50	888	4 30	**813**	18
885	885	886	887	887	886	884	884	882	**884**	7 54	890	5 14	879	19
874	875	876	877	877	878	876	876	872	877	4 22	**893**	11 42	871	20
868	867	868	871	870	870	879	868	869	869	1 58	878	5 20	857	21
..	..	..	..	..	..	844	845	846	..	.. ..	..	..	..	22§
847	847	848	849	850	850	848	848	846	846	8 38	852	5 10	833	23
846	845	846	847	847	845	845	845	845	846	10 46	850	5 46	838	24†
836	835	834	833	833	833	833	833	831	839	3 51	853	23 42	831	25
829	829	829	829	829	829	829	830	829	829	3 6	833	5 40	821	26†
830	830	831	832	829	828	827	831	830	829	9 10	835	5 50	816	27
837	838	840	840	840	840	838	837	837	841	9 0	856	1 40	830	28
852	853	853	854	852	852	852	851	850	848	18 10	855	1 30	831	29
858	859	855	855	858	857	857	856	856	857	9 0	870	1 54	849	30
850	850	851	851	851	850	850	849	848	849					Mean.§
837	838	838	839	838	838	837	837	836	837					Mean.†

DECEMBER.

866	866	866	866	865	865	864	864	864	864	8 48	867	0 0	856	1†
874	873	873	874	872	871	869	867	869	873	9 0	882	1 40	866	2
873	874	874	873	872	872	869	866	863	873	9 4	889	22 42	863	3
855	857	855	856	855	855	852	851	850	859	8 14	874	5 40	851	4
856	854	853	855	853	854	854	854	853	858	9 0	869	23 58	850	5
850	848	847	847	846	846	845	844	844	851	8 50	864	21 42	843	6
835	837	838	837	836	836	835	835	835	838	2 50	848	6 6	828	7
830	828	828	828	827	827	827	826	826	**828**	2 52	839	6 26	819	8
893	891	891	900	892	896	895	894	901	868	22 52	902	0 6	817	9
900	901	901	901	899	900	899	899	899	900	10 40	911	0 22	889	10
890	891	890	890	890	889	888	886	887	892	10 54	899	22 24	885	11
871	871	871	872	872	871	871	869	870	871	8 30	878	5 50	867	12
870	869	869	870	868	867	867	865	865	867	7 42	874	1 32	859	13
875	874	874	875	874	873	872	873	873	873	3 42	877	10 2	864	14†
896	895	894	894	893	892	892	892	891	894	4 2	901	6 16	886	15†
905	905	906	905	905	903	902	901	901	**905**	9 10	**914**	22 18	900	16
854	852	850	848	846	844	841	841	836	869	3 39	913	23 26	834	17
823	823	822	822	820	819	818	814	814	829	7 54	842	22 30	810	18
843	845	849	851	852	853	854	853	854	833	20 42	856	6 2	**798**	19
865	865	866	866	866	866	865	865	865	863	2 58	870	5 52	835	20
869	868	870	871	870	870	869	869	868	868	3 42	880	5 30	856	21
861	861	862	861	862	862	861	861	861	862	3 40	873	6 54	848	22
859	859	860	860	861	861	861	861	862	857	10 50	865	6 42	835	23
879	880	880	881	882	881	881	881	882	874	4 2	883	6 42	844	24†
883	882	881	881	881	881	881	881	880	880	3 4	894	7 14	865	25
884	883	883	883	883	882	881	881	881	883	4 20	900	6 44	866	26
886	886	886	885	884	881	883	881	885	883	4 10	902	7 44	856	27
880	878	878	877	876	875	874	874	871	877	11 28	885	23 42	867	28
868	867	867	867	867	867	866	865	864	867	3 45	884	8 56	841	29
862	861	861	861	861	860	859	858	856	860	4 10	870	6 4	837	30†
860	861	860	860	859	859	859	859	859	858	4 0	867	6 14	845	31
868	868	868	868	867	867	866	865	865	867					Mean.
874	873	873	873	872	871	869	869	868	873					Mean.†

*See footnote on page B-29.
†Five international quiet days.
§Curve faulty. The day has been omitted for means; mean of 29 days.

At Colaba, a day is classed as (1) a quiet day, or a day of (2) small, (3) moderate, (4) great or (5) very great disturbance, the letters for distinguishing each class being C, S, M, G and VG respectively. For representing intermediate conditions of activity of the small period movements, sub-classifications Ca, Sa and Ma are used. Roughly speaking a storm having a range over 225 γ in the variation of the horizontal force during the first twenty-four hours after its commencement is classed as " Very Great ". It is " Great " if the range is between 150 γ and 225 γ, "Moderate" if the range is between 65 γ and 150 γ and " Small " if the range is less than 65 γ. The range is however not the only criterion used in assigning the character of a storm. The oscillations in the magnetograms are duly taken into account in determining the class to which a particular storm should belong. During the year there was one day of " Very Great " one day of " Great ", 22 of " Moderate " and 195 of " Small " disturbances. The following table gives a list of principal disturbances recorded during the year. Of the smaller disturbances, only those which showed special features have been included in this table.

PRINCIPAL MAGNETIC DISTURBANCES, 1933.

Date.	Time of beginning. G. M. T.	Duration in hours.	Horizontal force during storm.				Range	Relative magnitude.	Remarks.
			Maximum.		Minimum.				
			Time.	Magnitude.	Time.	Magnitude.			
	H. M.		D. H. M.	γ	D. H. M.	γ	γ		
January 1	8 0	39	1 8 30	37424	1 15 36	37359	65	Sa	Commencement gradual.
„ 6	3 0	22	6 6 4	37431	6 13 44	37332	99	Ma	Do.
„ 14	18 0	31	15 4 20	37408	15 8 46	37313	95	M	Do.
„ 19	4 0	36	19 5 23	37430	19 15 20	37313	117	Ma	Do.
„ 21	21 0	30	22 5 44	37444	22 17 10	37330	114	M	Do.
„ 25	8 0	89	28 5 32	37419	25 16 2	37348	71	Sa	Do.
February 19	5 0	190	19 7 6	37444	21 15 46	37317	127	Ma	Do.
March 17	22 0	191	18 5 48	37435	22 11 24	37341	94	Ma	Do.
„ 27	4 0	20	27 5 30	37445	27 14 4	37338	107	M	Do.
April 15	20 26	124	18 6 56	37427	17 12 50	37302	125	M	Commencement sudden.
„ 30	16 28	50	30 16 38	37441	Mayl 17 52	37206	235	V.G.	Do.
May 17	6 0	41	17 6 20	37425	18 12 17	37346	79	S	Commencement gradual.
„ 29	6 26	90	29 6 34	37469	31 14 12	37350	119	Ma	Commencement sudden.
June 12	19 0	53	13 7 30	37423	13 16 10	37368	55	Sa	Commencement gradual.
„ 19	8 0	40	20 22 54	37419	20 14 46	37367	52	Sa	Do.
„ 25	10 2	25	26 3 52	37437	25 19 14	37394	43	S	Commencement sudden.
„ 27	13 32	57	28 5 0	37445	27 14 30	37378	67	Sa	Do.
July 8	20 48	26	8 21 48	37450	9 12 42	37350	100	M	Commencement sudden.
„ 17	7 0	28	17 9 50	37448	17 14 0	37371	77	Sa	Commencement gradual.
„ 23	9 42	31	24 6 44	37426	23 14 18	37346	80	M	Commencement sudden.
„ 26	22 0	26	27 8 0	37444	27 13 30	37374	70	S	Commencement gradual.
August 5	4 0	41	5 6 13	37462	5 18 30	37312	150	Ma	Commencement gradual.
„ 13	4 0	46	13 7 36	37467	14 14 52	37375	92	Sa	Do.
„ 17	4 0	68	17 6 28	37435	18 17 10	37372	63	S	Do.
„ 20	10 0	38	21 7 26	37434	21 11 0	37363	71	Sa	Do.
„ 23	3 0	43	23 6 44	37457	23 14 34	37368	89	Sa	Do.
September 8	21 24	52	9 4 20	37468	9 9 54	37255	213	G	Commencement sudden.
„ 13	10 29	61	14 17 38	37407	13 16 10	37311	127	M	Do.
„ 25	14 24	59	27 4 4	37462	25 17 34	37376	86	S	Do.
October 5	3 0	20	5 6 40	37437	5 11 40	37353	84	S	Commencement gradual.
„ 7	0 0	24	7 8 10	37436	7 11 4	37379	57	S	Do.
„ 8	14 0	36	9 19 16	37446	9 3 14	37392	54	S	Do.
„ 13	3 0	43	13 7 0	37453	13 13 50	37372	81	S	Do.
„ 17	13 0	34	18 5 54	37459	18 12 46	37356	103	Sa	Do.
„ 24	7 26	39	24 7 34	37468	24 16 8	37389	79	Sa	Commencement sudden.
November 6	4 0	69	6 5 40	37466	6 15 50	37340	126	M	Commencement gradual.
„ 11	6 0	17	11 6 56	37454	11 14 3	37397	57	S	Do.
„ 27	15 0	19	27 16 35	37453	27 20 6	37392	61	S	Do.
December 3	9 0	38	4 3 6	37447	4 11 44	37368	79	Sa	Do.
„ 5	2 0	22	5 5 42	37451	5 18 26	37389	62	Sa	Do.
„ 9	9 0	49	9 9 56	37453	9 16 46	37341	112	M	Do.

Fourier analysis of the diurnal and annual variations of Horizontal Force for the five International quiet days during 1933.

Diurnal variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from midnight to midnight (G. M. T.).

Annual variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

Quantity.	Diurnal Variation.												Annual Variation.
	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1	12·0	11·4	14·1	14·8	11·6	14·6	17·8	11·1	10·8	11·8	15·5	11·4	18·7
c_2	5·3	4·7	8·2	8·7	8·0	7·8	9·4	6·0	7·4	7·6	6·2	4·8	2·4
c_3	2·5	3·5	4·2	3·7	3·6	1·9	3·5	2·5	0·4	5·0	4·2	2·4	5·0
c_4	1·3	0·6	1·7	2·3	2·0	0·6	0·8	0·8	2·0	0·9	1·2	0·6	8·5
c_1/c_2	2·3	2·4	1·8	1·7	1·6	1·9	1·9	1·9	1·5	1·6	2·5	2·4	7·8
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
φ_1	358 53	350 29	344 16	341 9	0 20	359 46	349 9	350 1	353 53	10 27	4 3	352 38	77 17
φ_2	258 50	251 48	233 6	237 0	264 44	259 22	245 26	250 1	235 19	263 40	272 30	247 53	341 52
φ_3	182 46	163 58	173 57	151 1	191 58	176 7	158 37	156 19	163 27	176 8	201 54	156 14	284 22
φ_4	53 2	71 52	5 28	86 49	91 38	173 8	162 15	125 23	82 46	67 26	113 43	25 46	253 16

POTENTIAL GRADIENT IN VOLTS PER METRE, 1933.

Mean values for periods of sixty minutes centred at the full hours of Greenwich Mean Time.

Date.	January.				February.				March.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
1	168	126	148	52	277	71	97	80	154	54	163	159
2	258	126	151	210	279	61	104	105	217	91	114	108
3	258	115	131	284	199	79	97	149	205	78	108	171
4	388	138	250	205	135	81	138	138	265	68	77	149
5	297	319	184	243	163	52	60	87	209	77	104	118
6	264	126	181	206	233	64	117	174	213	91	149	217
7	137	64	142	186	192	89	111	172	186	83	36	27
8	163	126	170	170	291	87	152	197	101	100	136	72
9	150	241	80	315	234	69	121	117	199	—47	86	64
10	166	302	173	198	208	68	52	47	209	50	89	104
11	149	201	141	172	156	54	69	187	226	54	..	..
12	149	101	175	150	195	93	109	215	..	68	101	35
13	195	240	201	170	255	95	121	88	133	47	77	19
14	161	75	210	291	190	76	118	208	46	32	45	156
15	239	189	109	161	281	87	117	87	—362	86	55	141
16	298	158	284	276	119	87	118	94	118	119	63	117
17	252	323	171	209	131	91	122	189	118	104	73	54
18	390	134	115	241	163	82	78	199	122	73	122	137
19	289	103	149	315	182	182	94	203	256	—1143	7	116
20	304	115	148	201	160	104	69	251	253	75	90	75
21	224	129	117	119	147	95	79	173	229	41	100	86
22	321	—177	197	287	156	157	140	96	204	83	95	83
23	320	—9	—256	266	129	123	140	125	210	54	110	85
24	250	—30	44	196	146	108	64	123	83	73	91	77
25	421	67	135	265	174	157	73	199	186	53	100	80
26	241	118	131	186	247	96	140	96	234	29	75	53
27	193	..	163	300	223	105	156	199	91	77	89	51
28	178	93	137	158	138	185	139	87	83	59	111	73
29	197	104	115	83					209	—125	77	86
30	304	132	147	161					199	—1737	52	58
31	336	121	139	170					91	45	67	82
Mean (*a*)	247	151	155	211	193	96	107	146	174	69	89	95
Mean (*b*)	247	129	141	211	193	96	107	146	156	—38	89	95
	Mean (*a*) 189; Mean (*b*) 181.				Mean (*a*) 132; Mean (*b*) 130.				Mean (*a*) 108; Mean (*b*) 90.			

Date.	July.				August.				September.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
1	144	138	154	147	216	162	138	84	..	..	..	..
2	106	126	131	159	126	—203	116	137	..	..	..	..
3	122	125	125	140	53	149	119	154	..	..	95	Z—
4	137	128	135	147	—99	—143	33	145	310	89	100	85
5	149	129	174	144	—20	39	119	151	265	106	—142	126
6	132	144	120	132	128	116	149	166	252	90	144	54
7	114	119	121	135	131	149	101	131	246	138	272	102
8	114	109	144	Z+	98	178	178	125	156	226	12	54
9	127	128	140	Z+	3	119	134	163	90	557	81	—51
10	Z+	Z+	220	140	143	131	110	140	88	150	90	138
11	117	133	122	135	119	131	119	143	90	84	90	78
12	119	118	128	127	101	134	110	140	102	126	48	102
13	62	93	83	38	101	113	134	131	90	Z+	144	120
14	407	180	198	186	119	83	122	131	114	90	90	—568
15	168	101	Z+	Z+	131	107	128	143	126	204	78	108
16	108	126	210	72	92	143	131	143	156	156	186	180
17	198	24	158	163	110	128	101	110	156	132	186	156
18	161	126	122	129	101	98	110	86	132	126	188	180
19	93	141	119	122	104	83	59	42	180	150	162	192
20	138	130	135	120	80	Z+	Z+	Z+	150	107	100	99
21	117	102	137	141	101	98	86	157	87	83	127	129
22	65	118	129	108	356	140	..	..	101	115	113	125
23	115	85	126	130	..	..	77	160	101	101	121	134
24	94	114	112	132	140	143	157	151	111	97	97	76
25	108	130	77	140	217	175	95	125	74	110	119	67
26	120	113	117	128	116	122	125	140	129	106	122	177
27	473	156	138	114	122	119	149	178	175	90	135	168
28	132	192	204	204	110	125	89	59	261	92	98	..
29	162	174	162	198	51	122	128	110	..	77	Z±	Z—
30	112	—20	132	66	89	110	110	51	103	184	1122	72
31	—53	—101	120	—491	101	89	71	98				
Mean (*a*)	145	125	140	133	120	122	114	127	146	138	158	118
Mean (*b*)	139	113	140	111	108	102	114	127	146	138	147	84
	Mean (*a*) 133; Mean (*b*) 120.				Mean (*a*) 119; Mean (*b*) 110.				Mean (*a*) 130; Mean (*b*) 106.			
Mean of monthly hourly means.					Hours G. M. T.							
	0	1	2	3	4	5	6	7	8	9	10	11
Wet Period May to October.	91	110	116	121	115	117	107	113	109	108	98	114
Dry Period November to April.	140	148	157	171	167	162	142	124	106	81	75	85

(*a*) Mean from all positive readings.
(*b*) Mean from all complete days using both positive and negative readings.

POTENTIAL GRADIENT IN VOLTS PER METRE, 1933.

Mean values for periods of sixty minutes centred at the full hours of Greenwich Mean Time.

April.				May.				June.				Date.
3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	
188	77	61	49	72	95	93	93	45	27	63	58	1
170	71	119	Z+	167	59	104	79	94	112	113	111	2
Z+	76	111	101	82	95	101	79	109	108	143	124	3
195	70	83	93	77	83	90	48	169	93	136	91	4
220	—223	129	83	74	67	107	46	146	125	137	133	5
145	68	97	101	57	83	87	33	158	128	160	141	6
231	61	118	77	58	61	71	62	147	115	134	101	7
306	13	105	63	81	91	117	87	67	105	125	106	8
213	—30	74	84	104	67	101	66	177	121	120	120	9
87	73	99	93	74	52	84	42	126	124	125	146	10
77	62	91	77	57	65	51	29	125	118	140	143	11
64	76	96	92	45	81	76	35	127	146	159	147	12
68	72	90	74	58	75	77	28	125	137	148	153	13
63	85	100	100	270	76	55	—195	125	137	126	121	14
84	93	101	68	41	105	148	77	121	112	112	86	15
52	62	73	65	157	121	10	49	117	98	121	85	16
185	94	77	127	143	245	94	—63	109	102	124	108	17
122	—7	60	102	53	80	98	82	146	132	133	131	18
96	85	106	93	114	95	117	105	167	124	169	140	19
98	54	104	62	136	113	131	115	117	122	130	—347	20
74	75	100	65	161	114	126	65	114	56	144	108	21
153	68	99	71	79	98	123	83	0	Z—	—3	135	22
104	74	111	74	83	102	120	96	130	—86	117	76	23
167	60	77	54	93	111	123	112	58	—207	157	130	24
94	58	75	31	105	110	114	86	180	341	—135	135	25
68	62	81	55	85	110	123	114	117	108	180	175	26
52	83	68	64	86	97	98	55	—175	139	90	108	27
87	56	65	49	99	98	64	375	108	67	103	148	28
115	66	69	59	173	121	104	64	117	126	121	121	29
65	60	73	59	60	64	106	90	121	108	126	135	30
				..	162	—39	90					31
125	69	90	75	98	97	97	84	119	120	131	121	Mean (*a*)
125	53	90	75	98	97	93	71	109	101	117	106	Mean (*b*)
Mean (*a*) 85 ; Mean (*b*) 84.				Mean (*a*) 91; Mean (*b*) 85.				Mean (*a*) 126 ; Mean (*b*) 113.				

October.				November.				December.				Date.
3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	
224	271	238	180	138	61	147	222	170	221	239	..	1
149	9	180	156	182	95	121	160	..	257	186	184	2
174	114	—10	204	103	41	148	157	194	154	87	145	3
42	148	101	126	142	79	146	126	159	106	150	221	4
249	101	—780	126	132	85	121	158	146	137	196	200	5
144	144	—487	72	96	134	132	204	161	95	186	159	6
176	62	118	138	122	186	118	156	168	150	177	221	7
128	106	115	Z+	124	100	116	97	128	157	124	159	8
Z+	Z+	Z+	Z+	111	197	119	165	148	194	124	181	9
Z+	Z+	Z+	Z+	151	204	144	153	146	103	111	203	10
Z+	Z+	Z+	Z+	124	90	185	132	171	88	135	136	11
Z+	Z+	118	159	149	86	67	116	196	71	102	223	12
111	78	120	80	114	87	53	119	152	88	141	146	13
95	—31	192	60	102	53	112	114	125	99	158	149	14
66	66	114	96	180	91	213	107	104	105	146	165	15
114	102	203	115	111	92	73	176	167	137	232	150	16
128	78	113	129	99	111	142	90	115	74	106	190	17
18	106	123	83	76	5	169	80	191	134	78	65	18
106	90	85	106	80	Z	36	44	66	109	119	Z+	19
—37	99	111	72	Z+	Z−	Z+	Z+	161	133	159	248	20
80	111	83	69	Z+	Z+	69	67	239	103	150	184	21
12	92	61	63	117	163	102	98	234	119	141	133	22
157	74	101	134	107	98	129	Z+	249	111	146	210	23
130	58	106	195	124	182	117	156	189	131	159	194	24
148	127	119	207	249	89	124	124	203	115	172	248	25
146	129	106	149	267	98	259	165	136	106	228	201	26
152	124	97	184	131	196	178	151	177	47	141	122	27
258	95	97	145	124	105	200	Z+	221	106	166	181	28
115	87	138	195	107	240	151	191	196	114	122	124	29
111	106	132	156	156	..	217	196	283	141	150	211	30
166	111	122	166					247	283	239	285	31
131	103	124	132	133	116	135	138	175	129	154	181	Mean (*a*)
125	98	65	132	133	116	135	138	175	129	154	181	Mean (*b*)
Mean (*a*) 146 ; Mean (*b*) 136.				Mean (*a*) 130 ; Mean (*b*) 130.				Mean (*a*) 163 ; Mean (*b*) 162.				

Hours G. M. T.												Mean of monthly hourly means.
12	13	14	15	16	17	18	19	20	21	22	23	
123	107	128	113	117	113	119	114	111	105	108	107	Wet Period May to October.
81	93	110	119	138	148	151	159	151	141	131	128	Dry Period November to April.

Note:—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: Z+, Indeterminate, positive value; Z—, Indeterminate, negative value; Z± Indeterminate in magnitude and sign.

(*a*) Mean from all positive readings.

(*b*) Mean from all complete days using both positive and negative readings.

STATION.—COLABA, BOMBAY.

φ=18° 54′ N.; λ=72° 49′ E.; *h*=6 metres. *Subsoil*—Trap-rock.

Apparatus.—1. Milne-Shaw Seismograph (A_N—North-South Component).

2. Milne-Shaw Seismograph (A_E East-West Component).

(In the underground constant temperature room.)

TABLE D 2.

	Vm	T	ε
A_N	250	12 sec.	20 : 1
A_E	350	12 sec.	22 : 1

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.					
	A_N						
Jan. 1st	P	9 2 11	...	...	...	9390	Slight. Epc :— Near Solomon Islands. L-waves poorly developed.
	S	9 12 39	...	...	...	...	
	M	Movements		small.			
	F	11 3 0	...	...	...	...	
	A_E						
,, 1st	P	9 2 11	...	...	...	9390	Do.
	S	9 12 39	...	...	...	...	
	M	Movements		small.			
	F	11 9 0	...	...	...	...	
	A_N						
,, 3rd	P	15 37 38	...	...	...	6890	Slight. Epc :— Japan, near 40° 24′ N., 144° E. (C.M.O., Japan.)
	S	15 46 9	...	...	...	...	
	M	16 8 46	13	4	...	...	
	F	16 47 0	...	...	...	...	
	A_E						
,, 3rd	P	15 37 38	...	...	...	6890	Do.
	S	15 46 9	...	...	...	...	
	M	16 7 45	13	...	3	...	
	F	17 11 0	...	...	...	...	
	A_N						
,, 4th	P	1 35 33	...	...	...	7090	Slight. Epc :— Japan, near 25° 48′ N., 145° E. (C.M.O., Japan).
	S	1 44 15	...	...	...	...	
	F	3 24 0	...	...	...	...	
	A_E						
,, 4th	P	1 35 33	...	...	...	7090	Do.
	S	1 44 15	...	...	...	...	
	L	1 58 51	...	...	...	...	
	F	3 32 0	...	...	...	...	
	A_N						
,, 4th	P	4 12 44	...	...	...	8840	Slight.
	S	4 22 48	...	...	...	...	
	SR1	4 29 15	...	...	...	...	
	F	5 36 0	...	...	...	...	
	A_E						
,, 4th	P	4 12 44	...	...	...	8840	Do.
	S	4 22 48	...	...	...	...	
	M	4 52 13	18	...	6	...	
	F	5 33 0	...	...	...	...	
	A_N						
,, 4th	e	8 56 0	...	...	...	...	Tremors,
	i	9 9 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.				
	A_E					
Jan. 4th	e	8 56 0	...	...	...	Tremors.
	f	9 9 0	...	...	...	
	A_N					
,, 5th	e	1 33 0	...	...	...	Do.
	f	2 3 0	...	...	...	
	A_E					
,, 5th	e	1 33 0	...	...	...	Do.
	f	2 4 0	...	...	...	
	A_N					
,, 6th	c	19 33 0	...	...	...	Do.
	f	20 19 0	...	...	...	
	A_E					
,, 6th	e	19 33 0	...	...	...	Do.
	f	20 17 0	...	...	...	
	A_N					
,, 7th	P	4 17 16	...	...	7030	Moderate shock.
	S	4 25 53	...	...	...	Epc :— Japan, near 40° 18′ N., 144° E. (C.M.O. Japan).
	L	4 39 5	...	...	...	
	M	4 47 33	15	14	...	
	F	6 38 0	...	...	...	
	A_E					
,, 7th	P	4 17 15	...	...	7030	Do.
	S	4 25 54	...	...	...	
	L	4 39 5	...	...	...	
	M	4 47 54	15	...	12	
	F	7 13 0	...	...	...	
	A_N					
,, 7th	e	8 25 0	...	...	...	Tremors.
	f	8 35 0	...	...	...	
	A_E					
,, 7th	e	8 25 0	...	...	...	Do.
	f	8 35 0	...	...	...	
	A_E					
,, 8th	e	6 40 0	...	...	...	Do.
	f	7 37 0	...	...	...	
	A_N					
,, 8th	e	6 40 0	...	...	...	Do.
	f	7 35 0	...	...	...	
	A_E					
,, 8th	e	15 27 0	...	...	...	Do.
	f	15 41 0	...	...	...	

ate.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.					
	A_E						
Jan. 8th	e	15 27 0	...	...	...	...	Tremors.
	f	15 41 0	...	...	...	...	
	A_N						
,, 9th	P	2 5 37	...	...	...	1920	Moderate Epc :— North-west Frontier near 34° 30′ N., 72° 30′ E. Felt strongly at Drosh, Cherat, Peshawar and Rawal-pindi.
	S	2 8 49	...	...	...	...	
	L	2 10 49	...	...	...	...	
	M	2 13 49	9	33	...	...	
	F	3 54 0	...	...	...	...	
	A_E						
,, 9th	P	2 5 37	...	...	...	1920	Do.
	S	2 8 49	...	...	...	...	
	L	2 10 49	...	...	...	...	
	M	2 11 12	8	...	31	...	
	F	3 55 0	...	...	...	...	
	A_N						
,, 9th	e	8 50 0	...	...	...	...	Tremors.
	f	9 10 0	...	...	...	...	
	A_E						
,, 9th	e	8 49 0	...	...	...	...	Do.
	f	9 8 0	...	...	...	...	
	A_N						
,, 10th	e	3 40 0	...	...	...	...	D
	f	3 48 0	...	...	...	...	
	A_E						
,, 10th	e	3 40 0	...	...	...	...	Do.
	f	3 49 0	...	...	...	...	
	A_N						
,, 14th	e	5 25 0	...	...	...	...	Do.
	f	5 29 0	...	...	...	...	
	A_N						
,, 15th	e	18 14 3	...	...	...	...	Feeble.
	i	18 23 29	...	...	...	...	
	F	19 23 0	...	...	...	...	
	A_E						
,, 15th	e	18 14 3	...	...	...	...	Do.
	i	18 23 29	...	...	...	...	
	F	19 30 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A N	Amplitude (μ) A E	Distance (Km.)	Remarks.
1933.		H. M. S.					
Jan. 17th	A_N e	0 57 0	...	...	...	...	Traces.
	f	1 5 0	...	...	...	...	
	A_E						
,, 17th	e	0 57 0	...	...	...	...	Do.
	f	1 5 0	...	...	...	...	
	A_N						
,, 17th	e	16 11 0	...	...	...	...	Do.
	f	16 35 0	...	...	...	...	
	A_E						
,, 17th	e	16 11 0	...	...	...	...	Do.
	f	16 35 0	...	...	...	...	
	A_N						
,, 17th	P	18 57 17	...	...	...	5860	Slight.
	S	19 4 50	...	...	...	...	
	eL	19 16 14	...	...	...	...	
	M	19 18 6	17	5	...	...	
	F	20 22 0	...	...	...	...	
	A_E						
,, 17th	P	18 57 17	...	...	...	5860	Do.
	S	19 4 50	...	...	...	...	
	eL	19 16 14	...	...	...	...	
	M	19 18 41	15	...	2	...	
	F	20 24 0	...	...	...	...	
	A_N						
,, 17th	e	22 20 43	...	...	...	...	Feeble.
	i	22 24 43	...	...	...	...	
	F	23 1 0	...	...	...	...	
	A_E						
,, 17th	e	22 20 43	...	...	..	...	Do.
	i	22 24 43	...	...	...	...	
	F	23 1 0	...	...	...	...	
	A_N						
,, 18th	e	18 44 0	...	...	...	...	Tremors.
	f	19 1 0	...	...	...	...	
	A_E						
,, 18th	e	18 44 0	...	...	...	...	Do.
	f	19 4 0	...	...	...	...	
	A_N						
,, 20th	P	12 16 7	...	...	...	1920	Slight. Epc. :— North-west Frontier, near that of the 9th January.
	S	12 19 19	...	...	...	...	
	F	12 41 0	...	...	...	...	
	A_E						
,, 20th	P	12 16 7	...	...	...	1920	Do.
	S	12 19 19	...	...	...	...	
	F	12 42 0	...	...	...	...	
	A_N						
21st	e	16 30 0	...	...	...	...	Tremors.
	f	17 4 0	...	...	...	...	
	A_E						
,, 21st	e	16 30 0	...	...	...	...	Do.
	f	17 8 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A N	Amplitude (μ) A E	Distance (Km.)	Remarks.
1933.		H. M. S.					
Jan. 21st	A_N P	19 30 36	...	...	...	6160	Great. Epc. :— Indian Ocean, near 33°S. 58·5°E
	S	19 38 25	...	...	...	...	
	L	19 45 59	...	...	...	...	
	M	19 51 29	18	286	...	...	
	F	23 11 0	...	...	...	...	
	A_E						
,, 21st	P	19 30 36	...	...	...	6160	Do.
	S	19 38 25	...	...	...	...	
	L	19 45 59	...	...	...	...	
	M	19 49 59	17	...	168	...	
	F	23 20 0	...	...	...	...	
	A_N						
,, 23rd	e	0 15 0	...	...	...	...	Tremors.
	f	0 30 0	...	...	...	...	
	A_E						
,, 23rd	e	0 15 0	...	...	...	...	Do.
	f	10 30 0	...	...	...	...	
	A_N						
,, 24th	e	4 58 53	...	...	...	...	Very feeble near shock.
	i	4 59 28	...	...	...	...	
	F	5 15 0	...	...	...	...	
	A_E						
,, 24th	e	4 58 53	...	...	...	...	Do.
	i	4 59 28	...	...	...	...	
	F	5 15 0	...	...	...	...	
	A_N						
,, 25th	e	13 44 0	...	...	...	...	Tremors.
	f	14 3 0	...	...	...	...	
	A_E						
,, 25th	e	13 44 0	...	...	...	...	Do.
	f	14 3 0	...	...	...	...	
	A_N						
,, 26th-27th.	e	23 30 0	...	...	...	...	Slight near shock.
	i	23 31 50	...	...	...	...	
	F	0 2 0	...	...	...	...	
	A_E						
,, 26th-27th.	e	23 30 0	...	...	...	...	Do.
	ss i	23 31 50	...	...	...	...	
	F	0 0 0	...	...	...	...	
	A_N						
,, 27th	e	22 56 23	...	...	...	...	Very feeble, very distant.
	F	23 54 0	...	...	...	...	
	A_E						
,, 27th-28th.	e	22 56 23	...	...	...	...	Do.
	F	0 3 0	...	...	...	...	
	A_N						
,, 29th	e	18 23 0	...	...	...	...	Tremors.
	f	18 34 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A N	Amplitude (μ) A E	Distance (Km.)	Remarks.
1933.		H. M. S.					
Jan 29th	A_E e	18 24 0	...	...	...	...	Tremors
	f	18 33 0	...	...	...	...	
,, 30th	A_N e	20 39 0	...	...	...	...	Do.
	f	20 57 0	...	...	...		
,, 30th	A_E e	20 39 0	...	...	...	...	Do.
	f	20 57 0	...	...	...	...	
Feb. 3rd	A_N P	22 22 54	...	...	...	7680	Slight. Epc. :— Near Kurile Islands, 46°N., 151°E. (J. S. A.)
	S	22 31 59	...	...	...	...	
	L	22 46 25	...	...	...	...	
	M	22 49 36	19	5	...	...	
	F	23 30 0	...	...	...	...	
,, 3rd	A_E P	22 22 54	...	...	...	7680	Do.
	S	22 31 59	...	...	...	...	
	L	22 46 26	...	...	...	...	
	M	22 54 29	19	...	4	...	
	F	23 34 0	...	...	...	...	
,, 3rd	A_N e	11 25 0	...	...	...	...	Tremors
	f	11 41 0	...	...	...	...	
,, 3rd	A_E e	11 24 0	...	...	...	...	Do.
	f	11 46 0	...	...	...	...	
,, 5th	A_N e	4 30 0	...	...	...	...	Feeble, near shock.
	f	4 34 0	...	...	...	...	
,, 5th	A_E e	4 30 0	...	...	...	...	Do.
	f	4 34 0	...	...	...	...	
,, 9th	A_N e	15 46 0	...	...	...	...	Tremors.
	f	16 27 0	...	...	...	...	
,, 9th	A_E e	15 46 0	...	...	...	...	Do.
	f	16 37 0	...	...	...	...	
,, 10th	A_N e	14 15 0	...	...	...	...	Do.
	f	15 24 0	...	...	...	...	
,, 10th	A_E e	14 15 0	...	...	...	...	Do.
	f	15 31 0	...	...	...	...	
,, 13th	A_N P	Lost while changing chart.					Moderate Epc. :— Gobi Desert near 45° N.
	S	Do.		do.			
	M	3 9 29	8	15	...	3240	
	F	4 28 0	...	...	...	...	

ABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A	Amplitude (μ) A	Distance (Km.)	Remarks.
1933.		H. M. S.					
Feb. 13th	P	2 55 34	...	...	...	3240	Moderate Epc :— Gobi Desert, near 45° N. 89° E.
	S	3 0 34	...	...	...	...	
	M	3 9 5	9	...	14	...	
	F	Mixed up in the following tremors.					
„ 13th	e	4 34 0	...	...	...	...	Tremors.
	f	5 4 0	...	...	...	...	
„ 13th	e	4 33 0	...	...	...	...	Do.
	f	4 59 0	...	...	...	...	
14th	e	13 49 0	...	...	...	...	Do.
	f	14 8 0	...	...	...	...	
„ 14th	e	13 48 0	...	...	...	...	Do.
	f	14 0 0	...	...	...	...	
„ 16th	e	9 17 0	...	...	...	...	Do.
	f	9 53 0	...	...	...	...	
„ 16th	e	9 18 0	...	...	...	...	Do.
	f	10 2 0	...	...	...	...	
„ 19th	e	4 41 0	...	...	...	...	Do.
	f	5 24 0	...	...	...	...	
„ 19th	e	4 34 0	...	...	...	...	Do.
	f	5 36 0	...	...	...	...	
„ 20th	e	11 40 0	...	...	...	...	Do.
	f	12 12 0	...	...	...	...	
„ 20th	e	11 38 0	...	...	...	...	Do.
	f	12 8 0	...	...	...	...	
„ 21st	P	19 6 54	...	...	...	1960	Feeble.
	S	19 10 17	...	...	...	...	
	M	19 17 47	15	5	...	...	
	F	19 44 0	...	...	...	...	
„ 21st	P	19 6 54	...	...	...	1960	Do.
	S	19 10 17	...	...	...	...	
	M	19 16 2	14	...	3	...	
	F	19 49 0	...	...	...	...	
22nd	P	18 2 30	...	...	...	2580	Slight.
	S	18 6 42	...	...	...	...	
	L	18 9 26	...	...	...	...	
	M	18 12 29	14	8	...	...	
	F	18 44 0	...	...	...	...	
Feb. 22nd	P	18 2 30	...	...	...	2580	Slight.
	S	18 6 42	...	...	...	...	
	L	18 9 26	...	...	...	...	
	M	18 12 29	13	...	4	...	
	F	18 34 0	...	...	...	...	
„ 23rd	P	8 28 58	...	...	...	16900	Great shock.
	Sc Pc	8 39 30	...	...	...	...	Epc. :— Pacific Ocean off Northern Chille, 19° 30′ S., 71° W. (J. S. A.)
	PcS M	9 30 22	18	16	...	...	
	F	11 17 0	...	...	...	...	
„ 23rd	P	8 28 58	...	...	...	16900	Do.
	Sc Pc	8 39 30	...	...	...	...	
	PcS M	9 30 1	21	...	68	...	
	F	11 30 0	...	...	...	...	
„ 25th	e	4 27 0	...	...	...	...	Tremors.
	f	4 38 0	...	...	...	...	
„ 25th	e	4 27 0	...	...	...	...	Do.
	f	4 38 0	...	...	...	...	
„ 27th	e	16 34 0	...	...	...	...	Do.
	f	17 21 0	...	...	...	...	
„ 27th	e	16 34 0	...	...	...	...	Do.
	f	17 21 0	...	...	...	...	
Mar. 1st	e	16 25 0	...	...	...	...	Do.
	f	16 40 0	...	...	...	...	
„ 1st	e	16 26 0	...	...	...	...	Do.
	f	16 50 0	...	...	...	...	
„ 2nd	P	17 41 35	...	...	...	7250	Very great.
	S	17 50 25	...	...	...	...	Epc. :— Japan, near 39° 12′ N., 144° 36′ E. (C.M.O. Japan).
	L	18 5 29	...	...	...	...	
	M	18 16 9	16	611	...	..	
	F	23 27 0	...	...	...	...	
„ 2nd	P	17 41 35	...	...	...	7250	Do.
	S	17 50 25	...	...	...	...	
	L	18 5 29	...	...	...	...	
	M	18 18 9	16	...	477	...	
	F	23 33 0	...	...	...	...	
„ 3rd	e	2 28 0	...	...	...	...	Tremors.
	f	3 0 0	...	...	...	...	
„ 3rd	e	2 28 0	...	...	...	...	Do.
	f	3 5 0	...	...	...	...	
Mar. 3rd	P	4 48 24	...	...	...	7220	Slight. Epicentre in Japan.
	S	4 57 3	...	...	...	...	
	M	5 19 29	12	2	...	...	After shocks of the great shock of Mar. 2nd. 17 h. 42 m. (G.M.T.)
	F	5 31 0	...	...	...	...	
„ 3rd	P	4 48 24	...	...	...	7220	Do.
	S	4 57 3	...	...	...	...	
	M	5 20 41	13	...	1	...	
	F	5 30 0	...	...	...	...	
„ 3rd	P	9 23 19	...	...	...	7220	Do
	S	9 31 59	...	...	...	...	
	L	9 46 44	...	...	...	...	
	M	9 54 7	15	4	...	...	
	F	11 14 0	...	...	...	...	
„ 3rd	P	9 23 19	...	...	...	7220	Do.
	S	9 31 59	...	...	...	...	
	L	9 46 44	...	...	...	...	
	M	9 52 29	17	...	5	...	
	F	11 21 0	...	...	...	...	
„ 3rd	e	15 42 0	...	...	...	...	Tremors.
	f	16 4 0	...	...	...	...	
„ 3rd	e	15 39 0	...	...	...	...	Do.
	f	16 5 0	...	...	...	...	
„ 3rd	e	16 53 0	...	...	...	...	Do.
	f	16 57 0	...	...	...	...	
„ 3rd	e	16 52 0	...	...	...	...	Do.
	f	16 57 0	...	...	...	...	
„ 3rd	e	19 46 0	...	...	...	...	Do.
	f	19 54 0	...	...	...	...	
„ 3rd	e	19 46 0	...	...	...	...	Do.
	f	19 54 0	...	...	...	...	
„ 5th	e	8 30 0	...	...	...	...	Do.
	f	9 20 0	...	...	...	...	
„ 5th	e	8 30 0	...	...	...	...	Do.
	f	9 26 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance △ (Km.)	Remarks.
1933.		H. M. S.					
	A_N						
Mar. 6th	P	13 9 42	...	...	...	1850	Slight. Epc. :—Garo hills (West Assam). Felt at Dhubri, Gauhati, Cherrapunji, Rangpur Cooch Behar and Mymensingh.
	S	13 12 54	...	...	...	...	
	L	13 14 34	...	...	...	...	
	M	13 15 6	6	26	...	...	
	F	14 18 0	...	...	...	...	
	A_E						
„ 6th	P	13 9 42	...	...	...	1850	Do.
	S	13 12 54	...	...	...	...	
	L	13 14 34	...	...	...	...	
	M	13 15 19	8	...	19	...	
	F	14 17 0	...	...	...	...	
	A_N						
„ 11th	e	2 15 0	...	...	...	...	Very feeble movements, phases not clear. Shock reported to be destructive in California (U.S.A.)
	f	3 40 0	...	...	...	...	
	A_E						
„ 11th	e	2 13 0	...	...	...	...	Do.
	f	3 40 0	...	...	...	...	
	A_N						
„ 11th	e	14 32 49	...	...	...	...	Slight.
	i	14 41 50	...	...	...	...	
	M	15 5 5	15	5	...	...	
	F	15 58 0	...	...	...	...	
	A_E						
„ 11th	e	14 32 49	...	...	...	...	Do.
	i	14 41 50	...	...	...	...	
	M	15 4 50	15	...	4	...	
	F	16 1 0	...	...	...	...	
	A_N						
„ 11th	P	19 42 15	...	...	...	...	Slight. L-waves poorly developed.
	i	19 50 1	...	...	...	...	
	PS (?)	19 51 27	...	...	...	...	
	M	20 4 25	10	3	...	...	
	F	20 52 0	...	...	...	...	
	A_E						
„ 11th	P	19 42 15	...	...	...	...	Do.
	i	19 50 1	...	...	...	...	
	PS (?)	19 51 27	...	...	...	...	
	M	20 4 30	11	...	2	...	
	F	20 53 0	...	...	...	...	
	A_N						
„ 15th	e	5 28 0	...	...	...	...	Tremors.
	f	6 50 0	...	...	...	...	
	A_E						
„ 15th	e	5 17 0	...	...	...	...	Do.
	f	6 55 0	...	...	...	...	
1933.		H. M. S.					
	A_N						
Mar. 17th	P	16 7 0	...	...	...	8040	Moderate. Epc. :—Garo hills (West Assam). Felt at Dhubri, Gauhati, Cherrapunji, Rangpur Cooch Behar and Mymensingh.
	S	16 16 27	...	...	...	...	
	L	16 33 18	...	...	...	...	
	M	16 37 35	14	18	...	...	
	F	17 40 0	...	...	...	...	
	A_E						
„ 17th	P	16 7 0	...	...	...	8040	Do.
	S	16 16 27	...	...	...	...	
	L	16 33 18	...	...	...	...	
	M	16 43 1	18	...	40	...	
	F	18 42 0	...	...	...	...	
	A						
„ 17th	P	19 41 51	...	...	...	6320	Moderate. Epc. :—Near Mindanao Island, 6° 30′ N., 128° E. Manilla △ = 1200 Kms.
	S	19 49 50	...	...	...	...	
	L	20 0 48	...	...	...	...	
	M	20 15 34	15	9	...	...	
	F	21 25 0	...	...	...	...	
	A						
„ 17th	P	19 41 51	...	...	...	6320	Do.
	S	19 49 50	...	...	...	...	
	L	20 0 48	...	...	...	...	
	M	20 10 59	17	...	19	...	
	F	21 22 0	...	...	...	...	
	A_N						
„ 18th	e	3 24 0	...	...	...	...	Tremors.
	f	5 3 0	...	...	...	...	
	A_E						
„ 18th	e	3 22 0	...	...	...	...	Do.
	f	5 1 0	...	...	...	...	
	A_N						
„ 18th	e	18 30 0	...	...	...	...	Do.
	f	19 38 0	...	...	...	...	
	A_E						
„ 18th	e	18 30 0	...	...	...	...	Do.
	f	19 38 0	...	...	...	...	
	A_E						
„ 18th-19th.	e	23 58 0	...	...	...	...	Do.
	f	0 15 0	...	...	...	...	
	A_E						
„ 18th-19th.	e	23 58 0	...	...	...	...	Do.
	f	0 15 0	...	...	...	...	
	A_N						
„ 22nd	P	2 28 10	...	...	...	2760	Slight.
	S	2 32 36	...	...	...	...	
	F	2 58 0	...	...	...	...	
	A_E						
„ 22nd	P	2 28 10	...	...	...	760	Do.
	S	2 32 36	...	...	...	...	
	F	2 52 0	...	...	...	...	
1933.		H. M. S.					
	A_N						
Mar. 23rd	P	17 46 32	...	...	...	4060	Slight Epc. :—Gob Desert (China).
	S	17 52 23	...	...	...	...	
	L	17 57 58	...	...	...	...	
	M	18 2 34	10	8	...	...	
	F	18 38 0	...	...	...	...	
	A_E						
„ 23rd	P	17 46 32	...	...	...	4060	Do.
	S	17 52 23	...	...	...	...	
	L	17 57 58	...	...	...	...	
	M	18 0 6	11	...	7	...	
	F	18 39 0	...	...	...	...	
	A_N						
„ 30th	e	20 46 0	...	...	...	...	Tremors.
	f	21 7 0	...	...	...	...	
	A						
„ 30th	e	20 45 0	...	...	...	...	Do.
	f	21 4 0	...	...	...	...	
	A_N						
„ 31st	P	22 5 24	...	...	...	3040	Slight Epc. :—China, near 24°N., 102° E.
	S	22 10 10	...	...	...	...	
	L	22 14 42	...	...	...	...	
	M	22 15 17	13	4	...	...	
	F	22 34 0	...	...	...	...	
	A_E						
„ 31st	P	22 5 24	...	...	...	3050	Do.
	S	22 10 10	...	...	...	...	
	L	22 14 42	...	...	...	...	
	M	22 15 29	11	...	2	...	
	F	22 37 0	...	...	...	...	
	A_N						
Apl. 1st	e	16 18 0	...	...	...	...	Tremors.
	f	17 21 0	...	...	...	...	
	A_E						
„ 1st	e	16 18 0	...	...	...	...	Do.
	f	17 20 0	...	...	...	...	
	A_N						
„ 2nd	e	21 12 0	...	...	...	...	Do.
	f	21 29 0	...	...	...	...	
	A						
„ 2nd	e	21 12 0	...	...	...	...	Do.
	f	21 30 0	...	...	...	...	
	A_N						
„ 3rd	e	18 50 0	...	...	...	...	Do
	f	19 6 0	...	...	...	...	
	A_E						
„ 3rd	e	18 50 0	...	...	...	...	Do.
	f	19 6 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.					
	A_N						
April 9th	P	2 57 11	...	...	...	6980	Slight. Epc :— Japan, near 39° 30' N., 143°E. (J. S. A.).
	S	3 5 47	...	...	...	...	
	L	3 21 0	...	...	...	...	
	M	3 27 10	12	14	...	...	
	F	4 44 0	...	...	...	...	
	A_E						
,, 9th	P	2 57 11	...	...	...	6980	Do.
	S	3 5 47	...	...	...	...	
	L	3 19 8	...	...	...	...	
	M	3 28 0	13	...	11	...	
	F	4 56 0	...	...	...	...	
	A_N						
,, 9th	e	4 59 0	...	...	...	...	Tremors.
	f	5 45 0	...	...	...	...	
	A_E						
,, 9th	e	5 0 0	...	...	...	...	Do.
	f	5 45 0	...	...	...	...	
	A_N						
,, 13th	e	22 23 0	...	...	...	...	Do.
	f	25 31 0	...	...	...	...	
	A_E						
,, 13th	e	22 25 0	...	...	...	...	Do.
	f	23 16 0	...	...	...	...	
	A_N						
,, 16th	e	6 46 0	...	...	...	...	Do.
	f	7 38 0	...	...	...	...	
	A_N						
,, 16th	e	19 27 0	...	...	...	...	Do.
	f	20 4 0	...	...	...	...	
	A_E						
,, 16th	e	19 27 0	...	...	...	...	Do.
	f	20 50 0	...	...	...	...	
	A_E						
,, 19th	P	6 53 1	...	...	...	5010	Moderate.
	S	6 59 46	...	...	...	...	Epc. :—
	L	7 8 31	...	...	...	...	Formosa
	M	7 16 1	11	...	12	...	Island.
	F	8 20 0	...	...	...	...	
	A_N						
,, 28rd	P	6 5 38	...	...	...	5060	Slight. Epc. :— Kos Island in Aegean Sea, 36·5° N., 26·5° E. (Strasbourg)
	S	6 12 36	...	...	...	...	
	L	6 22 5	...	...	...	...	
	M	6 30 41	12	8	...	...	
	F	Mixed up in the following shock.					

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933		H. M. S.					
	A_E						
Apl. 23rd	P	6 5 38	...	...	...	5060	Slight. Epc :— Kos Islands in Aegean Sea, 36°5 N., 26°5 E. (Strasbourg.)
	S	6 12 36	...	...	...	...	
	L	6 22 5	...	...	...	...	
	M	6 26 37	15	...	13	...	
	F	Mixed up in the following shock.					
	A_N						
,, 23rd	P	7 24 12	...	...	...	6980	Slight. Epc. :— Japan, near that of April 9.
	S	7 32 48	...	...	...	...	
	L	7 47 39	...	...	...	...	
	M	7 54 21	13	6	...	...	
	F	9 28 0	...	...	...	...	
	A_E						
,, 23rd	P	7 24 12	...	...	...	6980	Do.
	S	7 32 48	...	...	...	...	
	L	7 47 39	...	...	...	...	
	M	7 59 4	11	...	3	...	
	F	9 49 0	...	...	...	...	
	A_N						
,, 27th	P	2 49 21	...	...	...	10300	Great. Epc. :— 61° N., 150°W. (U. S. C.G.S.) Destructive in Alaska.
	Sec.	2 59 55	...	...	...	...	
	L	3 22 17	...	...	...	...	
	M	3 35 47	14	78	...	...	
	F	6 15 0	...	...	...	...	
	A_E						
,, 27th	P	2 49 21	...	...	...	10300	Do.
	Sec.	2 59 55	...	...	...	...	
	L	3 22 17	...	...	...	...	
	M	3 37 10	13	...	37	...	
	F	6 3 0	...	...	...	...	
	A_N						
,, 27th	e	12 9 0	...	...	...	...	Tremors.
	f	13 40 0	...	...	...	...	
	A_E						
,, 27th	e	12 9 0	...	...	...	...	Do.
	f	13 33 0	...	...	...	...	
	A_N						
May 1st	e	19 2 0	...	...	...	...	Do.
	f	21 59 0	...	...	...	...	
	A_E						
,, 1st	e	19 2 0	...	...	...	...	Do.
	f	21 41 0	...	...	...	...	
	A_N						
,, 1-2nd	e	23 27 0	...	...	...	...	Do.
	f	0 21 0	...	...	...	...	
	A_E						
,, 1-2nd	e	23 32 0	...	...	...	...	Do.
	f	0 18 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.					
	A_N						
May 6th	e	5 53 0	...	...	...	...	Tremors.
	f	7 52 0	...	...	...	...	
	A_E						
,, 6th	e	5 53 0	...	...	...	...	Do.
	f	7 31 0	...	...	...	...	
	A_N						
,, 8th	i	10 53 15	...	...	...	...	Slight. Very distant. Beginning not traceable.
	M	11 59 29	28	33	...	...	
	F	13 13 0	...	...	...	...	
	A_E						
,, 8th	i	10 53 15	...	...	...	...	Do.
	M	12 4 3	28	...	13	...	
	F	12 51 0	...	...	...	...	
	A_N						
,, 11th	P	18 18 24	...	...	...	5140	Slight. Epc. :— Gulf of Salonica, 40° N., 24° E. (Strasbourg).
	S	18 25 16	...	...	...	...	
	L	18 34 43	...	...	...	...	
	F	20 32 0	...	...	...	...	
	A_E						
,, 11th	P	18 18 24	...	...	...	5140	Do.
	S	18 25 16	...	...	...	...	
	L	18 34 43	...	...	...	...	
	F	20 21 0	...	...	...	...	
	A_N						
,, 12th	P	16 16 14	...	...	...	2720	Slight. Epc. :— Upper Yangtse Valley (China) 25° N., 100° E.
	S	16 20 37	...	...	...	...	
	L	16 23 43	...	...	...	...	
	F	16 45 0	...	...	...	...	
	A_E						
,, 12th	P	16 16 14	...	...	...	2720	Do.
	S	16 20 37	...	...	...	...	
	L	16 23 43	...	...	...	...	
	F	16 49 0	...	...	...	...	
	A_N						
,, 16th	P	1 18 9	...	...	...	2900	Moderate Epc :— North west Sumatra.
	S	1 22 45	...	...	...	...	
	L	1 26 23	...	...	...	...	
	M	1 37 33	15	34	...	...	
	F	3 29 0	...	...	...	...	
	A_E						
,, 16th	P	1 18 9	...	...	...	2900	Do.
	S	1 22 45	...	...	...	...	
	L	1 26 23	...	...	...	...	
	M	1 37 43	17	...	53	...	
	F	3 17 0	...	...	...	...	
	A_N						
,, 18th	e	0 30 0	...	...	...	...	Tremors
	f	1 15 0	...	...	...	...	

TABLE D 2—*contd*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.					
May 18th	A_E e	0 32 0	...	...	...	...	Tremors.
	f	1 2 0	...	...	...	...	
,, 18th	A_N P	10 29 30	...	...	...	880	Slight.
	S	10 31 0	...	...	...	...	
	M	10 32 30	10	9	...	...	
	F	10 50 0	...	...	...	...	
,, 18th	A_E P	10 29 30	...	...	...	880	Do.
	S	10 31 0	...	...	...	...	
	M	10 32 30	9	...	6	...	
	F	10 50 0	...	...	...	...	
,, 19th	A_N e	17 35 0	...	...	...	...	Tremors.
	f	17 47 0	...	...	...	...	
,, 19th	A_E e	17 35 0	...	...	...	...	Do.
	f	17 45 0	...	...	...	...	
,, 19th	A_N P	18 11 1	...	...	...	9340	Slight. Epc. :— Atlantic Ocean, 1·5° S., 11°W. (Strasbourg).
	S	18 21 27	...	...	...	...	
	L	18 42 24	...	...	...	...	
	M	18 45 49	18	7	...	...	
	F	20 3 0	...	...	...	...	
,, 19th	A_E P	18 11 1	...	...	...	9340	Do.
	S	18 21 27	...	...	...	...	
	L	18 42 24	...	...	...	..	
	M	18 51 11	18	...	6	...	
	F	20 50 0	...	...	...	...	
,, 20th	A_N e	5 36 0	...	...	...	...	Tremors.
	f	6 21 0	...	...	...	...	
,, 20th	A_E e	5 36 0	...	...	...	...	Do.
	f	6 21 0	...	...	..	...	
June 2nd	A_N P	7 48 10	...	...	...	6220	Slight. Epc. :— Japan, near 31° 36′ N., 131° 6′ E. (Taihoku).
	S	7 56 3	...	...	...	...	
	L	8 7 39	...	...	...	...	
	M	8 14 28	12	3	...	...	
	F	8 35 0	...	...	...	...	
,, 2nd	A_E P	7 48 10	...	...	...	6220	Do.
	S	7 56 3	...	...	...	...	
	L	8 7 39	...	...	...	...	
	M	8 16 33	15	...	5	...	
	F	8 35 0	...	...	...	...	
1933.		H. M. S.					
June 3rd	A_N P	17 18 20	...	...	...	5810	Slight. Epc. :— Luchu Island 28° 30′ N., 129° 30′ E. (Taihoku).
	S	17 25 50	...	...	...	...	
	L	17 36 38	...	...	...	..	
	M	17 42 16	11	6	...	...	
	F	18 8 0	...	...	...	...	
,, 3rd	A_E P	17 18 20	...	...	...	5810	Do.
	S	17 25 50	...	...	...	...	
	L	17 36 38	...	...	...	...	
	M	17 45 5	15	...	4	...	
	F	17 54 0	...	...	...	...	
,, 6th	A_N P	2 36 49	...	...	...	4900	Slight. Epc. :— Philippine Island, 14° 20′ N., 121° 36′ E. (Manilla).
	S	2 43 28	...	...	...	...	
	L	2 52 16	...	...	...	..	
	M	2 57 38	15	5	...	...	
	F	3 41 0	...	...	...	...	
,, 6th	A_E P	2 36 49	...	...	...	4900	Do.
	S	2 43 28	...	...	...	...	
	L	2 52 16	...	...	...	...	
	M	2 57 16	15	...	4	...	
	F	3 29 0	...	...	...	...	
,, 7th	A_N P	11 51 44	...	...	...	2870	Moderate. Epc. :— Yangtse Valley (China) 25° 12′ N., 101° 54′ E (Chi u feng)
	S	11 56 18	...	...	...	...	
	L	12 0 16	...	...	...	...	
	M	12 3 34	8	21	...	...	
	F	12 49 0	...	...	...	...	
,, 7th	A_E P	11 51 44	...	...	...	2870	Do.
	S	11 56 18	...	...	...	...	
	L	12 0 16	...	...	...	...	
	M	12 3 34	8	...	17	...	
	F	12 49 0	...	...	...	...	
,, 8th	A_N P	18 21 16	...	...	...	7090	Slight. Epc. :— Japan, near 40° 12′ N., 144° E. (Taihoku).
	S	18 29 58	...	...	...	...	
	L	18 44 57	...	...	...	...	
	M	18 52 15	15	4	...	...	
	F	19 13 0	...	...	...	...	
,, 8th	A_E P	18 21 16	...	...	...	7090	Do.
	S	18 29 58	...	...	...	...	
	L	18 44 57	...	...	...	...	
	M	18 51 31	15	...	2	...	
	F	19 12 0	...	...	...	...	
1933.		H. M. S.					
June 10th	A_N e	12 48 0	...	...	...	...	Tremors.
	f	13 4 0	...	...	...	...	
,, 10th	A_E e	12 45 0	...	...	...	...	Do.
	f	13 4 0	...	...	...	...	
,, 12th	A_N e	18 43 0	...	...	...	...	Do.
	f	19 23 0	...	...	...	...	
,, 12th	A_E e	18 46 0	...	...	...	...	Do.
	f	19 15 0	...	...	...	...	
,, 13th	A_N P	20 44 8	...	...	...	6870	Slight. Epc. :— Japan off mouth of Mabuti River (Taihoku).
	S	20 52 38	...	...	...	...	
	L	21 6 53	...	...	...	...	
	M	21 12 29	18	5	...	...	
	F	22 9 0	...	...	...	...	
,, 13th	A_E P	20 44 8	...	...	...	6870	Do.
	S	20 53 38	...	...	...	...	
	L	21 6 53	...	...	...	...	
	M	21 13 17	17	...	3	...	
	F	21 38 0	...	...	...	...	
,, 13th	A_N e	23 7 0	...	...	...	...	Tremors
	f	23 45 0	...	...	...	...	
,, 13th	A_E e	23 9 0	...	...	...	...	Do.
	f	23 35 0	...	...	...	...	
,, 18th-19th.	A_N P	21 47 58	...	...	...	6750	Great. Epc. :— Japan, 38°N., 142°E. (U.S.C. G.S.) 43°N. 142°E. (Strasbourg).
	S	21 56 21	...	...	...	...	
	L	22 10 32	...	...	...	...	
	M	22 14 57	15	68	...	...	
	F	0 29 0	...	...	...	...	
,, 18th 19th.	A_E P	21 47 58	...	...	...	6750	Do.
	S	21 56 21	..	...	...	...	
	L	22 10 32	...	...	...	...	
	M	22 16 2	16	...	81	...	
	F	0 47 0	...	...	...	...	
,, 24th-25th.	A_N P	22 2 24	...	...	...	4440	Very great. Destructive in Southern Sumatra. Epc. :— 4°S., 103·5°E. (Strasbourg)
	S	22 8 38	...	...	..	...	
	L	22 15 16	...	...	...	...	
	M	22 19 5	18	550	...	...	
	F	2 15 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.).	AMPLITUDE (μ) A_N	AMPLITUDE (μ) A_E	Distance (Δ K. m.)	Remarks.
1933.		H. M. S.					
June 24th-25th.	A_E P	22 2 24	...	...	...	4440	Very great. Destructive in Southern Sumatra. Epc.:—4°S., 103°5°E (Strasbourg.)
	S	22 8 38	...	...	...	...	
	L	22 15 16	...	...	...	...	
	M	22 19 37 1	...	...	357	...	
	F	Confused in microseisms.					
	A_N						
,, 25th	e	18 4 0	...	...	...	...	Tremors.
	f	18 40 0	...	...	...	...	
	A_E						
,, 25th	e	18 11 0	...	...	...	...	Do.
	f	18 39 0	...	...	...	..	
	A_N						
,, 29th	e	0 23 0	...	...	...	...	Do.
	f	0 55 0	...	...	...	...	
	A_E						
,, 29th	e	0 23 0	...	...	...	...	Do.
	f	0 46 0	...	...	...	...	
	A_N						
July 3rd	P	15 18 10	...	...	...	3100	Slight. Epc.:—5°N., 80°W., west of Sumatra, Batavia Δ = 1910 kms.
	S	15 23 12	...	...	...	...	
	L	15 24 43	...	...	...	...	
	M	15 25 30	10	4	...	...	
	F	Mixed up with microseisms.					
	A_E						
,, 3rd	P	15 18 10	...	...	...	3100	Do.
	S	15 23 12	...	...	...	...	
	L	15 24 43	...	...	...	...	
	M	15 28 0	9	...	3	...	
	F	Mixed up with microseisms.					
	A_N						
,, 4th	e	3 1 0	...	...	...	...	Tremors.
	f	3 20 0	...	...	...	...	
	A_E						
,, 4th	e	3 5 0	...	...	...	...	Do.
	f	3 20 0	...	...	...	...	
	A_N						
,, 4th	e	7 33 0	...	...	...	...	Distant, feeble.
	M	7 39 44	15	8	...	...	
	F	Mixed up with microseisms.				...	
	A_E						
,, 4th	e	7 33 0	...	...	...	...	Do.
	M	7 39 14	13	...	7	...	
	F	Mixed up with microseisms.					
	A_N						
,, 8th	e	8 36 0	...	...	...	...	Tremors.
	f	8 52 0	...	...	...	...	
1933.		H. M. S.					
July 8th	A_E e	8 36 0	...	...	...	...	Tremors.
	f	8 51 0	...	...	...	...	
	A_N						
,, 9th	P	1 41 0	...	...	...	7780	Slight. Epc.:—near Kurile Islands.
	S	1 50 7	...	...	...	...	
	L	2 4 23	...	...	...	...	
	M	2 14 15	15	11	...	...	
	F	3 31 0	...	...	...	...	
	A_E						
,, 9th	P	1 41 0	...	...	...	7780	Do.
	S	1 50 7	...	...	...	...	
	L	2 4 23	...	...	...	...	
	M	2 16 45	15	...	8	...	
	F	Mixed up with microseisms.					
	A_N						
,, 9th	eP	9 38 53	...	...	...	7890	Slight.
	S	9 48 3	...	...	...	...	
	L	10 4 15	...	...	...	...	
	M	10 16 23	15	6	...	...	
	F	11 20 0	...	...	...	...	
	A_E						
,, 9th	eP	9 38 53	...	...	...	7890	Do.
	S	9 48 3	...	...	...	...	
	L	10 4 15	...	...	...	...	
	M	Uncertain				...	
	F	Mixed up with microseisms.				...	
	A_N						
,, 9th	P	12 41 37	...	...	...	7670	Moderate. Epc.:—45°N., 150°E. near Kurile Islands.
	S	12 50 45	...	...	...	...	
	L	13 7 2	...	...	...	...	
	M	13 14 49	15	26	...	...	
	F	15 24 0	...	...	...	...	
	A_E						
,, 9th	P	12 41 37	...	...	...	7670	Do.
	S	12 50 45	...	...	...	...	
	L	13 7 2	...	...	...	...	
	M	13 17 21	15	...	20	...	
	F	Confused with microseisms.				...	
	A_N						
,, 9th	e	16 19 0	...	...	...	...	Distant, very feeble.
	M	16 52 0	13	3	...	...	
	F	Confused with microseisms.					
	A_E						
,, 9th	e	16 19 0	...	...	...	...	Do.
	M	16 52 0	14	...	3	...	
	F	Confused with microseisms.					
	A_N						
,, 9th	e	22 52 0	...	...	...	...	Tremors.
	f	23 12 0	...	...	...	...	
1933.		H. M. S.					
July 9th	A_E e	22 54 0	...	...	...	...	Tremors.
	f	23 9 0	...	...	...	...	
	A_N						
,, 10th	e	0 32 0	...	...	...	...	Distant, feeble.
	M	1 1 37	15	3	...	...	
	F	Confused with microseisms.				...	
	A_E						
,, 10th	e	0 32 11	...	...	...	...	Do.
	M	Movements very small.				...	
	F	Confused with microseisms.				...	
	A_N						
,, 10th	e	3 45 0	...	...	...	...	Very distan, feeble.
	M	4 52 30	19	8	...	...	
	F	5 34 0	...	...	...	...	
	A_E						
,, 10th	e	3 45 0	...	...	...	...	Do.
	M	4 55 15	18	...	3	...	
	F	Confused with microseisms.					
	A_N						
,, 10th	e	10 44 0	...	...	...	...	Tremors.
	f	11 33 0	...	...	...	...	
	A_E						
,, 10th	e	10 44 0	...	...	...	...	Do.
	f	11 32 0	...	...	...	...	
	A_N						
,, 13th	e	8 28 0	...	...	...	...	Do.
	f	8 55 0	...	...	...	...	
	A_E						
,, 13th	e	8 27 0	...	...	...	...	Do.
	f	8 57 0	...	...	...	...	
	A_N						
,, 13th	e	14 31 0	...	...	...	...	Do.
	f	15 17 0	...	...	...	...	
	A_E						
,, 13th	e	14 31 0	...	...	...	...	Do.
	f	15 9 0	...	...	...	...	
	A_N						
,, 13th	eP	23 16 58	...	...	...	1940	Feeble. Epc.:—North Assam, felt at Gauhati.
	S	23 18 38	...	...	...	...	
	F	23 26 0	...	...	...	...	
	A_E						
,, 13th	eP	23 16 58	...	...	...	1940	Do.
	F	23 18 38	...	...	...	...	
	F	23 28 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.) Δ	Remarks.
1933.		H. M. S.					
July 16th–17th	A_N P	23 48 2	...	...	...	...	Slight, felt locally Origin probably within 100 kms. of Bombay.
	F	0 0 0	...	...	...	...	
	A_E P	23 48 2	...	...	...	...	
" 16th–17th.	F	0 0 0	...	...	...	...	Do.
	A_N e	19 24 0	...	...	...	...	Tremors.
" 18th	f	20 6 0	...	...	...	...	
	A_E e	19 24 0	...	...	...	...	Do.
" 18th	f	20 0 0	...	...	...	...	
	A_N e	11 9 0	...	...	...	...	Do.
" 19th	f	12 17 0	...	...	...	...	
	A_E e	11 9 0	...	...	...	...	Do.
" 19th	f	12 11 0	...	...	...	...	
	A_N e	14 17 0	...	...	...	...	Do.
" 19th	f	14 51 0	...	...	...	...	
	A_E e	14 17 0	...	...	...	...	Do.
" 19th	f	14 51 0	...	...	...	...	
	A_N e	15 45 0	...	...	...	...	Do.
" 19th	f	16 24 0	...	...	...	...	
	A_E e	15 45 0	...	...	...	...	Do.
19th	F	16 21 0	...	...	...	...	
	A_N e	20 54 0	...	...	...	...	Do.
" 19th	f	21 20 0	...	...	...	...	
	A e	20 54 0	...	...	...	...	Do.
" 19th	f	21 20 0	...	...	...	...	
	A_N e	22 33 0	...	...	...	...	Do.
" 20th	f	23 3 0	...	...	...	...	
	A_E e	22 33 0	...	...	...	...	Do.
20th	f	23 3 0	...	...	...	...	
	A_N e	20 25 28	...	...	...	12200	Slight. Epc :— Near Sandwich Islands.
" 21st	PS	20 35 28	...	...	...	...	
	SR_1	20 41 48	...	...	...	...	
	L	21 0 0	...	...	...	...	
	M	21 5 6	19	11	...	...	
	F	21 52 0	...	...	...	...	
July 21st	A_E e	20 25 28	...	...	...	12200	Slight Epc :— Near Sandwich Islands.
	PS	20 35 28	...	...	...	...	
	SR_1	20 41 48	...	...	...	...	
	L	21 0 0	...	...	...	...	
	M	21 4 45	19	...	8	...	
	F	22 43 0	...	...	...	...	
" 22nd–23rd.	A_N P	21 8 18	...	...	...	10300	Moderate, Epc :— Near Fox Islands.
	PS	21 20 25	...	...	...	...	
	SR_1	21 25 41	...	...	...	...	
	L	21 40 11	...	...	...	...	
	M	21 52 6	17	37	...	...	
	F	23 7 0	...	...	...	...	
" 22nd–23rd.	A_E P	21 8 18	...	...	...	10300	Do.
	PR_1	21 11 56	...	...	...	...	
	Sc	21 18 50	...	...	...	...	
	PcS						
	SR_1	21 25 48	...	...	...	...	
	eL	21 40 0	...	...	...	...	
	M	21 53 36	19	...	51	...	
	F	0 11 0	...	...	...	...	
" 24th	A_N e	19 21 16	...	...	...	...	Very distant, slight; confused with microseisms.
	e	19 32 27	...	...	...	...	
	M	20 12 34	19	4	...	...	
	F	20 18 0	...	...	...	...	
" 24th	A_E e	19 21 16	...	...	...	...	Do.
	e	19 32 27	...	...	...	...	
	L	19 44 12	...	...	...	...	
	M	20 10 20	19	...	3	...	
	F	21 18 0	...	...	...	...	
" 30th	A_N e	17 40 0	...	...	...	...	Tremors.
	f	18 3 0	...	...	...	...	
" 30th	A_E e	17 39 0	...	...	...	...	Do.
	f	17 54 0	...	...	...	...	
Aug. 4th	A_N e	17 42 25	...	...	...	...	Very feeble shock.
	F	18 2 0	...	...	...	...	
" 5th	A_N e	2 7 0	...	...	...	...	Tremors.
	f	2 12 0	...	...	...	...	
" 11th	A_N P	8 59 25	...	...	...	2850	Omori-Ewing data.
	eS	9 3 57	...	...	...	...	
	eL	9 6 27	...	...	...	...	Moderate. Epc :— 28°N., 97°E., near Namkin Mountains.
	F	9 30 0	...	...	...	...	
Aug. 11th	A_N e	11 22 50	...	...	...	...	Feeble.
	F	11 42 0	...	...	...	...	
" 13th	A_N eP	17 2 18	...	...	...	...	Do.
	M	17 6 32	7	1	...	...	
	F	17 22 0	...	...	...	...	
" 13th	A_N P	9 37 28	...	...	...	5960	Slight
	S	9 45 6	...	...	...	...	
	L	9 52 59	...	...	...	...	
	M	9 58 16	19	16	...	...	
	F	11 32 0	...	...	...	...	
" 13th	A_E P	9 37 28	...	...	...	5960	Do.
	S	9 45 6	...	...	...	...	
	L	9 52 37	...	...	...	...	
	M	9 56 50	19	...	7	...	
	F	10 16 0	...	...	...	...	
" 14th	A_N e	18 13 0	...	...	...	...	Tremors.
	f	18 32 0	...	...	...	...	
" 14th	A_E e	18 13 0	...	...	...	..	
	f	18 30 0	...	...	...	...	
" 14th	A_N e	22 27 0	...	...	...	...	Feeble.
	M	22 35 10	11	3	...	...	
	F	22 48 0	...	...	...	...	
" 14th	A_E e	22 27 0	...	...	...	..	Do.
	M	22 35 10	...	...	...	..	
	F	22 48 0	...	...	...	..	
" 15th	A_N e	3 8 29	...	...	...	..	Feeble, distant
	e	3 17 10	...	...	...	...	
	F	3 55 0	...	...	...	...	
" 15th	A_E e	3 8 29	...	...	...	...	Do
	e	3 17 10	...	...	...	...	
	F	3 49 0	...	...	...	...	
" 20th	A_N i	11 54 8	...	...	...	...	Slight, distant
	i	12 1 16	...	...	...	...	
	M	12 17 54	14	9	...	...	
	F	13 33 0	...	...	...	...	
" 20th	A_E i	11 54 8	...	...	...	...	Do.
	i	12 1 16	...	...	...	...	
	M	12 17 38	15	...	10	...	
	F	13 25 0	...	...	...	..	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance Δ (Km.)	Remarks
1933.		H. M. S					
Aug. 22nd	A_N e	11 11 4	...	...	...	...	Feeble, distant.
	M	11 40 15	19	3	...	...	
	F	12 34 0	...	...	...	...	
, 2-nd	A_N e	13 29 16	...	...	...	...	Very feeble.
	M	13 45 23	...	...	...	...	
	F	14 16 0	...	...	...	...	
,, 22nd	A_N i	21 44 17	...	...	...	...	Do.
	i	21 48 30	...	...	...	...	
	F	22 35 0	...	...	...	...	
,, 24th	A_N e	22 53 0	...	...	...	...	Tremors.
	f	23 23 0	...	...	...	...	
,, 25th	A_N e	4 37 0	...	...	...	...	Do.
	f	5 16 0	...	...	...	...	
,, 25th	A_N e	5 44 0	...	...	...	...	Do.
	f	6 23 0	...	...	...	...	
,, 26th	A_N P	7 56 45	...	...	...	3340	Great. Destructive in China. Epc:— 32°N., 103·5°E.
	PR_1	7 57 33	...	...	...	...	
	S	8 1 51	...	...	...	...	
	SR_1	8 3 23	...	...	...	...	
	L	8 5 37	...	...	...	...	
	M	8 7 33	18	857	...	...	
	F	Mixed up with after shock.					
,, 26th	A_N e	11 55 0	...	...	...	...	Tremors.
	f	12 14 0	...	...	...	...	
,, 26th	A_N e	13 16 0	...	...	...	...	Do.
	f	13 28 0	...	...	...	...	
,, 28th-29th.	A_N eP	22 34 26	...	...	...	12400	Great. Epc:— Near Sandwich Islands, 58°S., 27°W. (J.S.A.)
	PR_1	22 38 54	...	...	...	...	
	Sc	22 45 0	...	...	...	...	
	PcS						
	PS	22 48 26	...	...	...	...	
	PPS	22 49 25	...	...	...	...	
	SR_1	22 54 25	...	...	...	...	
	L	23 12 20	...	...	...	...	
	M	23 41 17	17	61	...	...	
	F	2 59 0	...	...	...	...	
,, 29th	A_N e	15 10 23	...	...	...	...	Slight.
	e	15 20 11	...	...	...	...	
	F	16 27 0	...	...	...	...	
Date.	Phase.	Time G. M. S.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance Δ (Km.)	Remarks
1933.		H. M. S.					
Sep. 2nd	A_N i	16 50 45	...	...	...	...	L-waves poorly developed.
	i	16 58 27	...	...	...	...	
	M	Movements small.					
	F	18 44 0	...	...	...	...	
,, 2nd	A_E i	16 50 45	...	...	...	...	
	i	16 58 27	...	...	...	...	Do.
	M	Movements small.					
	F	18 3 0	...	...	...	...	
,, 6th	A_N e	1 40 0	...	...	...	...	Tremors.
	f	2 33 0	...	...	...	...	
	A_E e	1 49 0	...	...	...	...	Do.
	f	2 18 0	...	...	...	...	
,, 8th	A_N e	10 33 0	...	...	...	...	Do.
	f	10 58 0	...	...	...	...	
	A_E e	10 37 0	...	...	...	...	Do.
	f	10 55 0	...	...	...	...	
,, 6th	A_N e	17 37 28	...	...	...	...	Slight.
	M	17 59 20	15	4	...	...	
	F	18 11 0	...	...	...	...	
	A_E e	17 37 28	...	...	...	...	Do.
	M	Movements too small.					
	F	18 52 0	...	...	...	...	
, 6-7th	A_N P	22 22 27	...	...	...	13300	Slight.
	S	22 35 57	...	...	...	...	L-waves poorly developed. Epc:— Pacific Ocean, 24°S., 178°W. (J.S.A.)
	M	23 20 27	17	3	...	...	
	F	0 49 0	...	...	...	...	
,, 6-7th	A_E P	22 22 27	...	...	...	...	
	S	22 35 57	...	...	...	13300	Do.
	M	Uncertain.					
	F	0 28 0	...	...	...	...	
,, 7th	A_N e	18 8 0	...	...	...	...	Tremors.
	f	18 32 0	...	...	...	...	
,, 7-8th	A_N e	23 14 0	...	...	...	...	Feeble.
	M	23 23 56	17	5	...	...	
	F	0 2 0	...	...	...	...	
,, 9th	A_N e	1 58 0	...	...	...	...	Tremors.
	f	2 4 0	...	...	...	...	
,, 9th	A_N e	4 23 0	...	...	...	...	Do.
	f	5 48 0	...	...	...	...	
Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance Δ (Km.)	Remarks
1933.		H. M. S.					
Sept. 13th	A e	18 16 0	...	...	...	...	Tremors.
	f	14 32 0	...	...	...	...	
,, 14th	A_N e	22 53 0	...	...	...	...	Do.
	f	23 18 0	...	...	...	...	
,, 15th	A_N e	16 34 0	...	...	...	...	Do.
	f	17 9 0	...	...	...	...	
,, 15th	A_N e	20 6 0	...	...	...	...	Do.
	f	20 38 0	...	...	...	...	
,, 20th	A e	0 31 0	...	...	...	...	Do.
	f	0 53 0	...	...	...	...	
,, 20-21st	A_N e	23 42 3	...	...	...	...	Slight.
	i	23 48 48	...	...	...	...	
	M	0 5 13	14	3	...	...	
	F	0 40 0	...	...	...	...	
,, 20-21st	A_E i	23 42 3	...	...	...	...	Do
	i	23 48 48	...	...	...	...	
	M	0 5 33	14	...	3	...	
	F	0 49 0	...	...	...	...	
,, 21st	A_N e	3 24 22	...	...	...	...	Very feeble, distant.
	M	3 53 22	13	2	...	...	
	F	4 24 0	...	...	...	...	
,, 21st	A_E e	3 24 42	...	...	...	...	Do.
	M	3 51 39	13	...	3	...	
	F	4 25 0	...	...	...	...	
,, 21st	A_N e	4 26 0	...	...	...	...	Tremors.
	f	4 52 0	...	...	...	...	
,, 21st	A_E e	4 26 0	...	...	...	...	Do.
	f	4 58 0	...	...	...	...	
,, 21st	A_N P	9 58 32	...	...	...	7290	Slight Epc:— Near n Jap.
	eS	10 7 22	...	...	...	...	
,, 21st	L	10 22 13	...	...	...	...	
	M	10 29 28	13	5	...	...	
	F	11 30 0	...	...	...	...	
,, 21st	A_E P	9 58 32	...	...	...	7290	Do.
	S	10 7 22	...	...	...	...	
	L	10 22 13	...	...	...	...	
	M	10 27 58	13	...	3	...	
	F	11 38 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Sep. 21st	A_N e	14 16 0	...	...	...	...	Tremors.
	f	14 33 0	...	...	...	...	
	A_E e	14 17 0	...	...	...	...	Do.
	f	14 33 0	...	...	...	...	
,, 21st	A_N e	19 18 0	...	...	...	...	Do.
	f	19 38 0	...	...	...	...	
,, 21st	A_E e	19 19 0	...	...	...	...	Do.
	f	19 37 0	...	...	...	...	
,, 24th	A_N P	15 32 21	...	...	...	10000	Slight. Epc.:— Near Aleutian Islands, 51° N., 177° W, (U. S. C. G. S.).
	S	15 43 13	...	...	...	...	
	eL	16 4 0	...	...	...	...	
	M	16 14 18	20	14	...	...	
	F	18 14 0	...	...	...	...	
,, 24th	A_E P	15 32 21	...	...	...	10000	Do.
	S	15 42 43	...	...	...	...	
	eL	16 4 0	...	...	...	...	
	M	16 11 58	20	...	10	...	
	F	18 25 0	...	...	...	...	
25th	A_N eP	13 55 7	...	...	...	5960	Slight.
	eS	14 2 41	...	...	...	...	
	eL	14 14 26	...	...	...	...	
	F	14 39 0	...	...	...	...	
,, 25th	A_E eP	13 55 7	...	...	...	5960	Do.
	eS	14 2 41	...	...	...	...	
	eL	14 14 26	...	...	...	...	
	F	14 42 0	...	...	...	...	
,, 25th	A_N P	18 56 29	...	...	...	2590	Moderate. Epc.:— Near Kokoshili range in China, 37° N., 87° E.
	S	19 0 40	...	...	...	...	
	SR_1	19 1 40	...	...	...	...	
	L	19 2 55	...	...	...	...	
	M	19 14 18	9	30	...	...	
	F	21 12 0	...	...	...	...	
,, 25th	A_E P	18 56 29	...	...	...	2590	Do.
	S	19 0 40	...	...	...	...	
	SR_1	19 1 35	...	...	...	...	
	L	19 2 52	...	...	...	...	
	M	19 4 26	10	...	22	...	
	F	21 9 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Sep. 27th	A_N e	21 53 36	...	...	...	...	Very feeble.
	F	22 56 0	...	...	...	...	
,, 27th	A_E e	21 53 36	...	...	...	...	Do.
	F	22 47 0	...	...	...	...	
,, 30th	A_N i	14 32 0	...	...	...	...	Feeble, distant.
	M	15 0 45	23	7	...	...	
	F	17 18 0	...	...	...	...	
,, 30th	A_E i	14 32 0	...	...	...	...	Do.
	M	15 2 41	20	...	5	...	
	F	17 21 0	...	...	...	...	
Oct. 1st	A_N e	2 59 0	...	...	...	...	Tremors.
	f	3 9 0	...	...	...	...	
,, 1st	A_E e	2 57 0	...	...	...	...	Do.
	f	3 9 0	...	...	...	...	
,, 2nd	A_N e	14 21 0	...	...	...	...	Do.
	f	15 25 0	...	...	...	...	
,, 2nd	A_E e	14 23 0	...	...	...	...	Do.
	f	15 35 0	...	...	...	...	
,, 3rd	A_N P^1	15 49 15	...	...	...	17200	Moderate. Epc.:— Pacific Ocean, West of Central America, 2·5° S., 80° W. (J. S. A.) Do.
	PR_1	15 52 48	...	...	...	...	
	SR_1	16 12 0	...	...	...	...	
	M	17 4 7	17	14	...	...	
	F	18 53 0	...	...	...	...	
,, 3rd	A_E P^1	15 49 15	...	...	...	17200	Do.
	PR_1	15 52 48	...	...	...	...	
	SR_2	16 12 0	...	...	...	...	
	M	17 3 26	17	...	23	...	
	F	19 6 0	...	...	...	...	
,, 3rd	A_N e	10 34 0	...	...	...	...	Tremors.
	f	11 15 0	...	...	...	...	
,, 3rd	A_N e	10 32 0	...	...	...	...	Do.
	f	11 12 0	...	...	...	...	
,, 3rd	A_N e	11 42 0	...	...	...	...	Do.
	f	13 0 0	...	...	...	...	
,, 3rd	A_E e	11 41 0	...	...	...	...	Do.
	f	13 0 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Oct. 3rd	A_N eP	18 48 55	...	...	...	6780	Slight.
	S	18 57 10	...	...	...	...	
	eL	19 10 0	...	...	...	...	
	M	19 16 40	15	3	...	...	
	F	19 48 0	...	...	...	...	
,, 3rd	A_E P	18 48 55	...	...	...	6780	Do.
	S	18 57 10	...	...	...	...	
	eL	19 10 0	...	...	...	...	
	M	19 17 14	15	...	3	...	
	F	19 49 0					
,, 4th	A_N e	16 33 0	...	...	...	...	Tremors.
	f	17 12 0	...	...	...	...	
,, 4th	A_E e	16 33 0	...	...	...	...	Do.
	f	17 12 0	...	...	...	...	
,, 5th	A_N e	12 20 0	...	...	...	...	Do.
	f	12 53 0	...	...	...	...	
,, 5th	A_E e	12 20 0	...	...	...	...	Do.
	f	12 50 0	...	...	...	...	
,, 5th	A_N P	13 34 29	...	...	...	2370	Moderate.
	S	13 38 24	...	...	...	...	Epc.:— Northern Persia, 35° N. 57° E.
	SR_1	13 39 22	...	...	...	...	
	M	13 44 33	13	36	...	...	
	F	15 22 0	...	...	...	...	
,, 5th	A_E P	13 34 29	...	...	...	2370	Do.
	S	13 38 24	...	...	...	...	
	SR1	13 39 21	...	...	...	..	
	L	13 40 25	...	...	...	...	
	M	13 42 36	17	...	70	...	
	F	15 18 0	...	...	..	...	
,, 5th	A_N e	16 35 0	...	...	..	...	Tremors.
	f	17 0 0	...	...	..	...	
,, 5th	A_E e	16 35 0	...	...	..	..	Do.
	f	17 1 0	...	...	..	..	
,, 7th	A_E e	2 55 0	...	...	..	...	Do.
	f	3 6 0	...	...	..	...	
,, 7th	A_E e	2 56 0	...	...	..	...	Do.
	f	3 8 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time. G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks	Date.	Phase.	Time. G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.	Date.	Phase.	Time. G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H. M. S.						1933.		H. M. S.						1933.		H. M. S.					
Oct. 9th	A_N e	9 55 0	...	...	...	...	Tremors.	Oct. 16th	A_E e	11 21 0	...	...	...	...	Tremors.	Oct. 22nd	A_N e	12 14 6	...	...	...	...	Slight, very distant.
	f	10 1 0	...	...	...	...			f	11 35 0	...	...	...	...			M	12 35 41	15	3	...	...	
									A_N								F	13 11 0	...	...	...	...	
,, 9th	A_L e	9 55 0	...	...	...	...	Do.	,, 17th	e	12 36 0	...	...	...	...	Do.								
	f	10 1 0	...	...	...	...			f	13 5 0	...	...	...	...			A_E						
																,, 22nd	e	12 14 6	...	...	...	...	Do.
	A_N								A_E								M	12 39 29	14	...	3	...	
,, 10th	e	12 36 0	...	...	...	...	Do	,, 17th	e	12 36 0	...	...	...	...	Do.		F	13 11 0	...	...	...	...	
	f	13 17 0	...	...	...	...			f	13 12 0	...	...	...	...			A_N						
									A_N							,, 22nd	e	14 6 6	...	...	...	...	Feeble, distant
	A_N								e	5 31 11	...	...	...	...	Very feeble, masked by micro-seisms		M	14 15 48	9	3	...	...	
,, 11th	e	1 19 0	...	...	...	...	Do.	,, 19th	F	5 49 0	...	...	...	...			F	14 30 0	...	...	...	...	
	f	1 43 0	...	...	...	...											A_E						
									A_E							,, 22nd	e	14 6 6	...	...	...	...	Do.
	A_E							,, 19th	e	5 31 11	...	...	...	...	Do.		L	14 12 45	...	...	...	..	
,, 11th	e	1 21 0	...	...	...	...	Do.		F	5 50 0	...	...	...	...			M	14 45 10	9	...	2	...	
	f	1 43 0	...	...	...	...											F	14 29 0	...	...	...	...	
	A_N								A_N								A_N						
,, 13th	e	11 49 0	...	...	..	...	Do.	,, 19th	e	6 5 0	...	...	...	...	Tremors.		e	4 59 0	...	...	...	...	Tremors.
	f	11 56 0	...	...	..	...			f	6 11 0	...	...	...	...		,, 23rd	f	5 31 0	...	...	...	...	
	A_E								A_E								A_E						
, 13th	e	11 50 0	...	...	...	...	Do.	,, 19th	e	6 5 0	...	...	...	...	Do.	,, 23rd	e	5 0 0	...	...	...	...	Do.
	f	11 58 0	...	...	...	...			f	6 11 0	...	...	...	...			f	5 27 0	...	...	...	...	
	A_N								A_N								A_N						
,, 14th	e	22 32 19	...	...	...	...	Feeble, distant.	,, 21st	P	54 52	.	...	...	6890	Slight.	,, 23rd	e	12 59 0	...	...	...	...	Do.
	M	23 18 49	19	5	...	...			S	3 3 1[illegible]	...	...	...	...			f	13 17 0	...	...	...	...	
	F	23 52 0	...	...	...	...			M	3 24 15	14	3	...	...									
	A_E								F	4 0 0	...	...	...	...			A_E						
,, 14th	e	22 32 19	...	...	...	...	Do.									,, 23rd	e	12 59 0	...	...	...	...	Do.
	M	23 19 30	19	...	5	...			A_E								f	13 20 0	...	...	...	...	
	F	23 49 0	...	...	...	...		,, 21st	P	2 54 52	...	...	...	6890	Do.								
									S	3 3 15	...	...	...	...			A_N						
	A_N								M	3 26 41	15	...	1	...		,, 23rd	e	13 42 20	...	...	...	...	Feeble, distant.
,, 16th	e	3 37 0	...	...	...	...	Tremors.		F	3 56 0	...	...	...	...			i	13 50 4	...	...	...	...	
	f	3 51 0	...	...	...	...											M	14 6 8	11	3	...	...	
	A_E								A_N								F	14 59 0	...	...	...	...	
,, 16th	e	3 37 0	...	...	...	...	Do.	,, 21st	e	7 59 0	...	...	...	...	Tremors.								
	f	3 53 0	...	...	...	...			f	8 14 0	...	...	...	...			A_E						
																,, 23rd	e	13 42 20	...	...	...	...	Do.
	A_N								A_E								i	13 50 4	...	...	...	...	
,, 16th	P	4 38 18	...	...	...	3220	Slight.	,, 21st	e	7 59 0	...	...	...	...	Do.		M	14 3 42	11	...	3	...	
	S	4 43 19	...	...	...	...			f	8 14 0	...	...	...	...			F	15 4 0	...	...	...	...	
	L	4 46 30	...	...	...	...																	
	M	4 47 12	7	8	..	...			A_N								A_N						
	F	5 15 0	...	...	..	...		,, 21st	e	8 25 0	...	...	...	...	Do.	,, 23rd	e	22 32 0	...	...	...	...	Tremors.
									f	8 43 0	...	...	...	...			f	22 47 0	...	...	...	...	
	A_E																						
, 16th	eP	4 38 18	...	...	...	3220	Do.		A_N								A_E						
	S	4 43 19	...	...	...	...		,, 21st	e	8 27 0	...	...	...	...	Do.								
	L	4 46 15	...	...	...	...			f	8 38 0	...	...	...	...		,, 23rd	e	22 32 0	...	...	...	..	Do.
	M	4 48 14	9	...	5	...											f	22 46 0	...	...	...	...	
	F	5 19 0	...	...	...	...			A_N														
								,, 22nd	e	0 45 0	...	...	...	...	Do.		A_N						
	A_N								f	1 36 0	...	...	...	...		,, 24th	e	5 33 19	...	...	...	...	Very feeble.
,, 16th	e	11 20 0	...	...	...	...	Tremors.										e	5 37 93	...	...	...	...	
	f	11 36 0	...	...	...	...		,, 22nd	A_E e	0 45 0	...	...	...	...	Do.		M	5 45 7	7	1	...	...	
									f	1 33 0	...	...	...	...			F	6 0 0	...	...	...	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ). A	Distance (Km.) △	Remarks.
1933.		H. M. S.				
Oct. 24th	A_E i	5 33 19	...	... ...	...	Very feeble.
	i	5 37 33	...	... ...	...	
	F	5 59 0	...	... ...	...	
	A_N					
,, 24th	e	10 42 0	...	... ...	...	Tremors.
	f	10 45 0	...	... ...	...	
	A_E					
,, 24th	e	10 42 0	...	... ...	...	Do.
	f	10 45 0	...	... ...	...	
	A_N					
,, 25th 26th	e	23 47 17	...	... ...	16000	Slight Epc: — South America. 22°S, 68° W. (J. S. A.)
	M	0 42 7	19	4 ...	...	
	F	1 52 0	...	... ...	...	
	A_E					
,, 25th 26th	P¹	23 47 17	...	... ...	16000	Do.
	Sc P cP	23 51 30	...	... ...	...	
	P Sc PcS	0 0 34	...	... ...	...	
	M	0 39 5	20	... 7	...	
	F	2 4 0	...	... ...	...	
	A_N					
,, 25th 26th	eP	7 3 23	...	... ...	2170	Feeble.
	S	7 7 0	...	... ...	...	
	F	7 26 0	...	... ...	...	
	A_E					
,, 25th 26th	eP	7 3 23	...	... ...	2170	Do.
	S	7 7 0	...	... ...	...	
	F	7 31 0	...	... ...	...	
	A_N					
,, 26th	e	8 43 0	...	... ...	...	Tremors.
	f	8 59 0	...	... ...	...	
	A_E					
,, 26th	e	8 47 0	...	... ...	...	Do.
	f	9 3 0	...	... ...	...	
	A_N					
,, 26th	e	12 28 0	...	... ...	...	Feeble.
	M	13 34 0	17	5 ...	...	
	F	14 56 0	...	... ...	...	
	A_E					
,, 26th	e	12 28 0	...	... ...	...	Do.
	M	13 34 0	17	... 4	...	
	F	14 57 0	...	... ...	...	
	A_N					
,, 26th	eP	20 53 36	...	... ...	...	Do.
	M	20 58 59	7	1 ...	...	
	F	21 4 0	...	... ...	...	
	A_E					
,, 26th	eP	20 53 36	...	... ...	...	Do.
	F	21 7 0	...	... ...	...	
	A_N					
,, 30th	e	7 21 0	...	... ...	...	Tremors
	f	8 38 0	...	... ...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE (μ) A_N	AMPLITUDE (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Oct. 30th	A_E e	7 17 21	...	...	...	...	Tremors.
	F	8 53 0	...	...	...	...	
,, 30th	A_N e	11 43 0	...	...	...	...	Do.
	f	11 55 0	...	...	...	...	
,, 30th	A_E e	11 43 0	...	...	...	...	Do.
	f	11 51 0	...	...	...	...	
Nov. 2nd	A_N P	12 39 47	..	...	...	1100 0	Slight. Epc:— North Pacific Ocean, 45°N., 168°W. (J.S.A.)
	S(?)	12 51 21	...	...	...	...	
	eL	13 13 0	...	...	...	...	
	M	13 21 43	21	8	...	...	
	F	15 17 0	...	...	...	...	
,, 2nd	A_E P	12 39 47	...	...	...	11000	Do.
	S(?)	12 51 21	...	...	...	...	
	eL	13 11 54	...	...	...	...	
	M	13 21 43	21	...	9	...	
	F	15 26 0	...	...	...	...	
,, 2nd	A_N e	13 7 30	...	...	...	...	Very feeble.
	e	13 11 26	...	...	...	...	
	M	13 17 26	13	2	...	...	
	F	13 35 0	...	...	...	...	
,, 3rd	A_E e	13 7 30	...	...	...	...	Do.
	e	13 11 26	...	...	...	...	
	L	13 14 4	...	...	...	...	
	M	13 16 42	11	...	2	...	
	F	13 36 0	...	...	...	...	
,, 5th	A P	20 32 34	...	...	...	2880	Slight. Epc:— North-east frontier of Burma, 25°N., 98°E. Nanking △ = 2370 kms.
	S	20 37 3	...	...	...	...	
	L	20 40 21	...	...	...	...	
	F	21 21 0	...	...	...	...	
,, 5th	A_E P	20 32 34	...	...	...	2880	Do.
	S	20 37 3	...	...	...	...	
	L	20 40 21	...	...	...	...	
	F	21 21 0	...	...	...	...	
,, 6th	A_N e	7 19 0	...	...	...	...	Tremors.
	f	7 43 0	...	...	...	...	
,, 6th	A_E e	7 19 0	...	...	...	...	Do.
	f	7 50 0	...	...	...	...	
,, 7th	A_N e	6 51 0	...	...	...	...	Do.
	f	7 11 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	AMPLITUDE. (μ) A_N	AMPLITUDE. (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Nov. 7th	A_E f	6 58 0	...	...	...	..	Tremors.
		7 10 0	...	...	...	...	
,, 7th	A_N P	11 14 45	...	...	...	2320	Slight. Epc:— Near Arakan Coast, 20°N., 93°E. Nanking △ = 2974 kms. Calcutta △ = 560 kms.)
	S	11 18 33	...	...	...	...	
	L	11 20 33	...	...	...	...	
	M	11 22 31	7	4	...	...	
	F	11 40 0	...	...	...	...	
,, 7th		11 14 45	...	...	...	2320	Do.
		11 18 33	...	...	...	...	
		11 20 33	...	...	...	...	
		11 22 31	8	...	3	...	
		11 38 0	..	...	...	...	
,, 8th	A_N Pe	14 24 29	...	...	...	1500	Slight. Probable origin in Nepal. Agra △ = 500 kms.
	S	14 27 6	...	...	...	...	
	L	14 28 14	...	...	...	...	
	F	14 42 0	...	...	...	...	
,, 8th	A_E P	14 24 29	...	...	...	1500	Do.
	S	14 27 6	...	...	...	...	
	L	14 28 14	...	...	...	...	
	F	14 42 0	...	...	...	...	
,, 14th	A_N e	14 25 0	...	...	...	...	Tremors.
	f	14 59 0	...	...	...	...	
,, 14th	A_E e	14 25 0	...	...	...	...	Do.
	F	14 41 0	...	...	...	...	
,, 15th	A_N e	5 2 0	...	...	...	...	Do.
	f	5 22 0	...	...	...	...	
,, 15th	A_E e	5 3 0	...	...	...	...	Do.
	f	5 21 0	...	...	...	...	
,, 18th	A_N e	4 17 0	...	...	...	...	Do.
	f	4 28 0	...	...	...	...	
,, 18th	A_E e	4 17 0	...	...	...	...	Do.
	f	4 26 0	...	...	...	...	
,, 18th	A_N	17 12 0	...	...	..	...	Do.
	f	18 20 0	...	...	..	...	
,, 18th	A_E e	17 12 0	..	...	..	...	Do.
	f	18 20 0	...	...	..	...	

TABLE D 2—*contd.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.) △	Remarks.
1933.		H. M. S.					
Nov. 19th	A_N e	3 28 0	...	...	...	...	Tremors.
	f	5 17 0	...	...	...	...	
,, 19th	A_E e	3 28 0	...	...	...	...	Do.
	f	5 17 0	...	...	...	...	
,, 19th	A_N P	9 14 4	...	...	...	2880	Slight. Epc:— North-east frontier of Burma. Same origin as on the 5th November.
	S	9 18 34	...	...	...	...	
	L	9 21 50	...	...	...	...	
	F	9 54 0	...	...	...	...	
,, 19th	A_E P	9 14 4	...	...	...	2880	Do.
	S	9 18 34	...	...	...	...	
	L	9 21 50	...	...	...	...	
	F	9 50 0	...	...	...	...	
,, 20th-21st.	A_N P	23 34 11	...	...	...	9200	Great shock. Epc.— Baffin Bay.
	S	23 44 30	...	...	...	...	
	L	0 4 16	...	...	...	...	
	M	0 16 32	22	101	...	...	
	F	3 26 0	...	...	...	...	
,, 20th-21st.	A_E P	23 34 11	...	...	...	9200	Do.
	S	23 44 30	...	...	...	...	
	L	0 4 16	...	...	...	...	
	M	0 9 8	21	...	80	...	
	F	3 18 0	...	...	...	...	
,, 22nd	A_N e	1 4 0	...	...	...	...	Tremors.
	f	2 47 0	...	...	...	...	
,, 22nd	A_E e	1 1 0	...	...	...	...	Do.
	f	2 48 0	...	...	...	...	
,, 22nd	A_N P	12 54 37	...	...	...	8830	Slight. Epc:— East of New Guinea, 3°S. 150°E. (J.S.A.)
	S	13 4 45	...	...	...	...	
	L	13 24 15	...	...	...	...	
	M	13 28 23	23	14	...	...	
	F	16 35 0	...	...	...	...	
,, 22nd	A_E P	12 54 37	...	...	...	8830	Do.
	S	13 4 45	...	...	...	...	
	L	13 22 15	...	...	...	...	
	M	13 32 37	23	...	10	...	
	F	15 47 0	...	...	...	...	
,, 22nd	A_N e	18 24 0	...	...	...	...	Tremors
	f	18 44 0	...	...	...	...	
,, 22nd	A_E e	18 30 0	...	...	...	...	Do.
	f	18 46 0	...	...	...	...	
Nov. 22nd	A_N e	22 48 0	...	...	...	...	Tremors.
	f	23 28 0	...	...	...	...	
,, 22nd	A_E e	22 48 0	...	...	...	...	Do.
	f	23 29 0	...	...	...	...	
,, 23rd	A_N e	18 53 0	...	...	...	...	Do.
	f	19 57 0	...	...	...	...	
	A_E e	18 53 0	...	...	...	...	Do.
	f	20 0 0	...	...	...	...	
,, 23rd	A_N e	20 16 0	...	...	...	...	Do.
	f	20 54 0	...	...	...	...	
,, 23rd	A_E e	20 14 0	...	...	...	...	Do.
	f	20 48 0	...	...	...	...	
,, 24th	A_N e	4 3 0	...	...	...	...	Do.
	f	4 19 0	...	...	...	...	
,, 24th	A_E e	4 3 0	...	...	...	...	Do.
	f	4 16 0	...	...	...	...	
,, 24th	A_N e	8 16 0	...	...	...	...	Do.
	f	8 24 0	...	...	...	...	
,, 24th	A_E e	8 16 0	...	...	...	...	Do.
	f	8 24 0	...	...	...	...	
,, 25th	A_N e	1 18 0	...	...	...	...	Do.
	f	1 23 0	...	...	...	...	
,, 25th	A_E e	1 18 0	...	...	...	...	Do.
	f	1 30 0	...	...	...	...	
,, 28th	A_N e	8 22 0	...	...	...	...	Do.
	f	8 39 0	...	...	...	...	
,, 28th	A_E e	8 22 0	...	...	...	...	Do.
	f	8 40 0	...	...	...	...	
,, 28th	A_N P	11 13 51	...	...	...	2430	Moderate. Epc:— North Persia, 35° N. 57° E. Nanking △ = 5720 kms.
	S	11 17 49	...	...	...	...	
	L	11 19 59	...	...	...	...	
	M	11 27 19	11	27	...	...	
	F	13 10 0	...	...	...	...	
,, 28th	A P	11 13 51	...	...	...	2430	Do.
	S	11 17 49	...	...	...	...	
	L	11 19 59	...	...	...	...	
	M	11 25 19	12	...	26	...	
	F	13 17 0	...	...	...	...	
Nov. 28th	A_N e	16 8 0	...	...	...	...	Tremors.
	f	16 33 0	...	...	...	...	
,, 28th	A_E e	16 8 0	...	...	...	...	Do.
	f	16 30 0	...	...	...	...	
,, 29th	A_N P	3 4 7	...	...	...	...	Very feeble, distant.
	S	3 8 30	...	...	...	...	
	M	3 12 15	8	2	...	...	
	F	3 26 0	...	...	...	...	
,, 29th	A_E P	3 4 7	...	...	...	...	Do.
	S	3 8 30	...	...	...	...	
	M	3 13 45	7	...	1	...	
	F	3 26 0	...	...	...	...	
,, 29th	A_N e	6 24 0	...	...	...	...	Tremors.
	f	7 4 0	...	...	...	...	
,, 29th	A_E e	6 23 0	...	...	...	...	Do.
	f	7 4 0	...	...	...	...	
Dec. 1st	A_N e	10 48 0	...	...	...	...	Do.
	f	11 4 0	...	...	...	...	
,, 1st	A_E e	10 48 0	...	...	...	...	Do.
	f	11 2 0	...	...	...	...	
,, 2nd	A_N e	2 19 22	...	...	...	...	Very feeble, distant.
	F	2 50 0	...	...	...	...	
,, 2nd	A_E e	Lost while changing paper.					
	M	2 25 30	...	...	...	...	Do.
	F	2 45 0	...	...	...	...	
,, 2nd	A_N eP	5 34 45	...	...	...	...	Do.
	M	6 19 30	15	3	...	...	
	F	7 16 0	...	...	...	...	
,, 2nd	A_E eP	5 34 45	...	...	...	...	Do.
	M	6 19 45	15	...	2	...	
	F	7 7 0	...	...	...	...	
,, 2nd	A_N e	8 52 0	...	...	...	...	Tremors.
	f	9 31 0	...	...	...	...	
,, 2nd	A_E e	8 51 0	...	...	...	...	Do.
	f	9 32 0	...	...	...	...	
,, 2nd	A_N e	20 26 17	...	...	...	...	Feeble, distant.
	M	21 56 40	15	3	...	...	
	F	22 52 0	...	...	...	...	

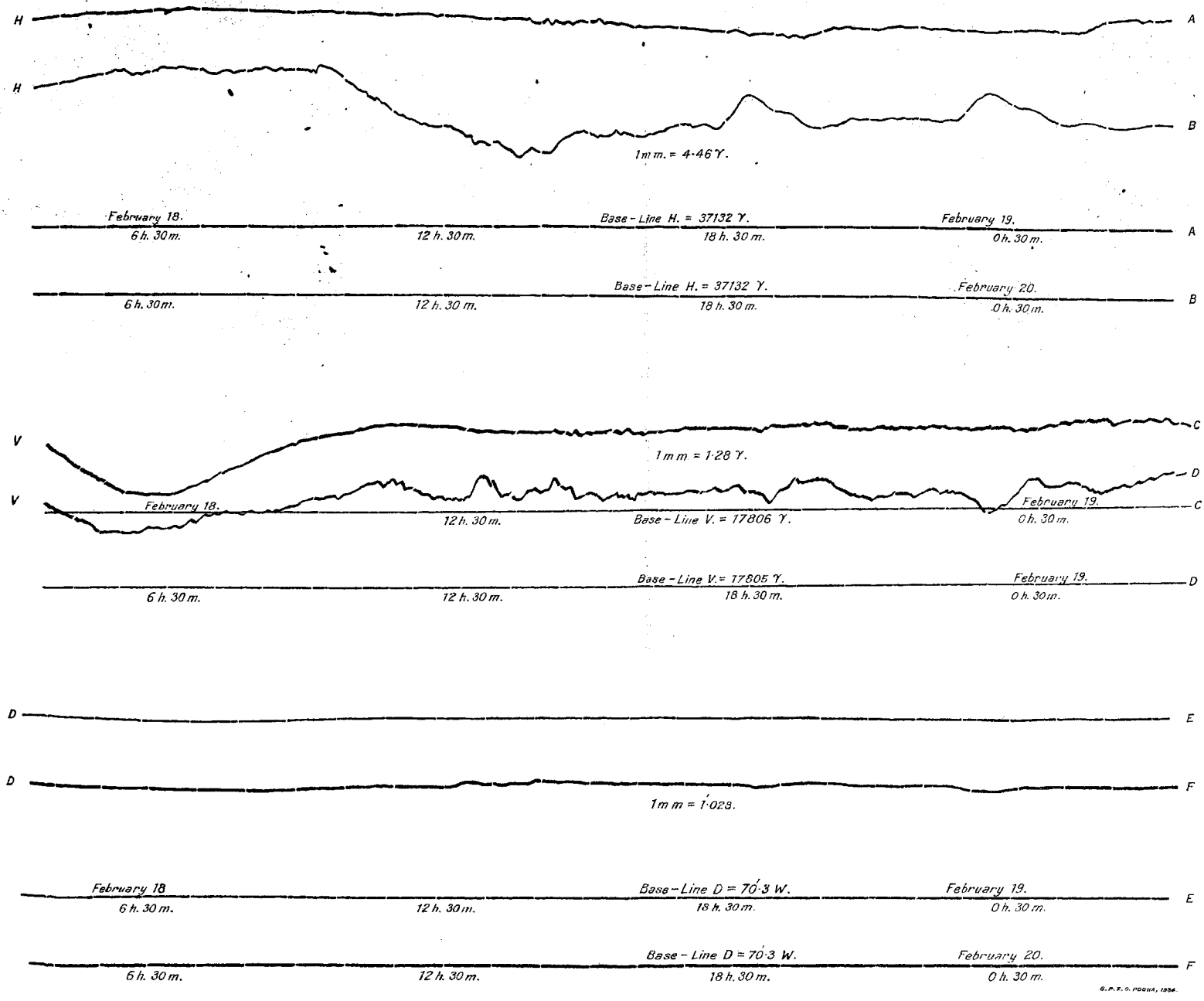
TABLE D 2—*concld.*

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance △ (Km.)	Remarks
1933.		H. M. S.					
Dec. 3rd	A_N e	13 20 0	...	...	...	...	Tremors.
	f	13 39 0	...	...	...	...	
	A_E e	13 19 0	...	...	...	...	
„ 3rd	f	13 36 0	...	...	...	...	
	A_N P	14 45 13	...	...	...	2200	Slight.
„ 4th	S	14 48 49	...	...	...		Origin in Assam near Cherrapunji hills. Felt at Cherrapunji, Shillong and Gauhati.
	F	16 20 0	...	...	...	...	
„ 4th.	A_N e	19 34 27	...	...	...	...	Feeble, very distant.
	e	19 43 57	...	...	...	...	
	F	20 47 0	...	...	...	...	
„ 6th	A_E e	0 7 0	...	...	...	...	Tremors.
	f	0 28 0	...	...	...	...	
„ 9th	A_E eP	7 56 14	...	...	...	1950	Slight.
	S	7 59 29	...	...	...	...	Probable origin in Afghanistan.
	eL	8 1 0	...	...	...	...	
	F	8 36 0	...	...	...	...	
„ 12th	A_N e	3 8 0	...	...	...	...	Tremors.
	f	3 18 0	...	...	...	...	
„ 12th	A_E e	3 8 0	...	...	...	...	Do.
	f	3 18 0	...	...	...	...	
„ 12th	A_N i	5 26 11	...	...	.	...	Very feeble, distant.
	i	5 30 6	...	...		...	
	M	5 40 37	...	...	...	...	
	F	6 0 0	...	...	...	...	
„ 12th	A_E i	5 26 11	...	...	...	...	Do.
	i	5 30 6	...	...	...	...	
	M	5 38 52	...	...	...	...	
	F	5 53 0	...	...	...	...	
„ 12th	A_N P	14 23 37	...	...	...	9440	Slight. Epc:— East New Guinea, 6° S., 153° E. Perth (S-P) △ = 4346 kms Nanking △ = 5300 kms Do.
	Sc Pc S	14 33 45	...	...	...	...	
	SR1	14 39 45	...	...	...	...	
	M	15 5 32	18	4	...	...	
	F	16 52 0	...	...	...	...	
„ 12th	A_E P	14 23 37	...	...	...	9440	
	Sc Pc S	14 33 45	...	...	...	...	
	SR_1	14 39 45	...	...	...	...	
	M	15 3 47	19	...	5	...	
	F	17 9 0	...	...	...	...	

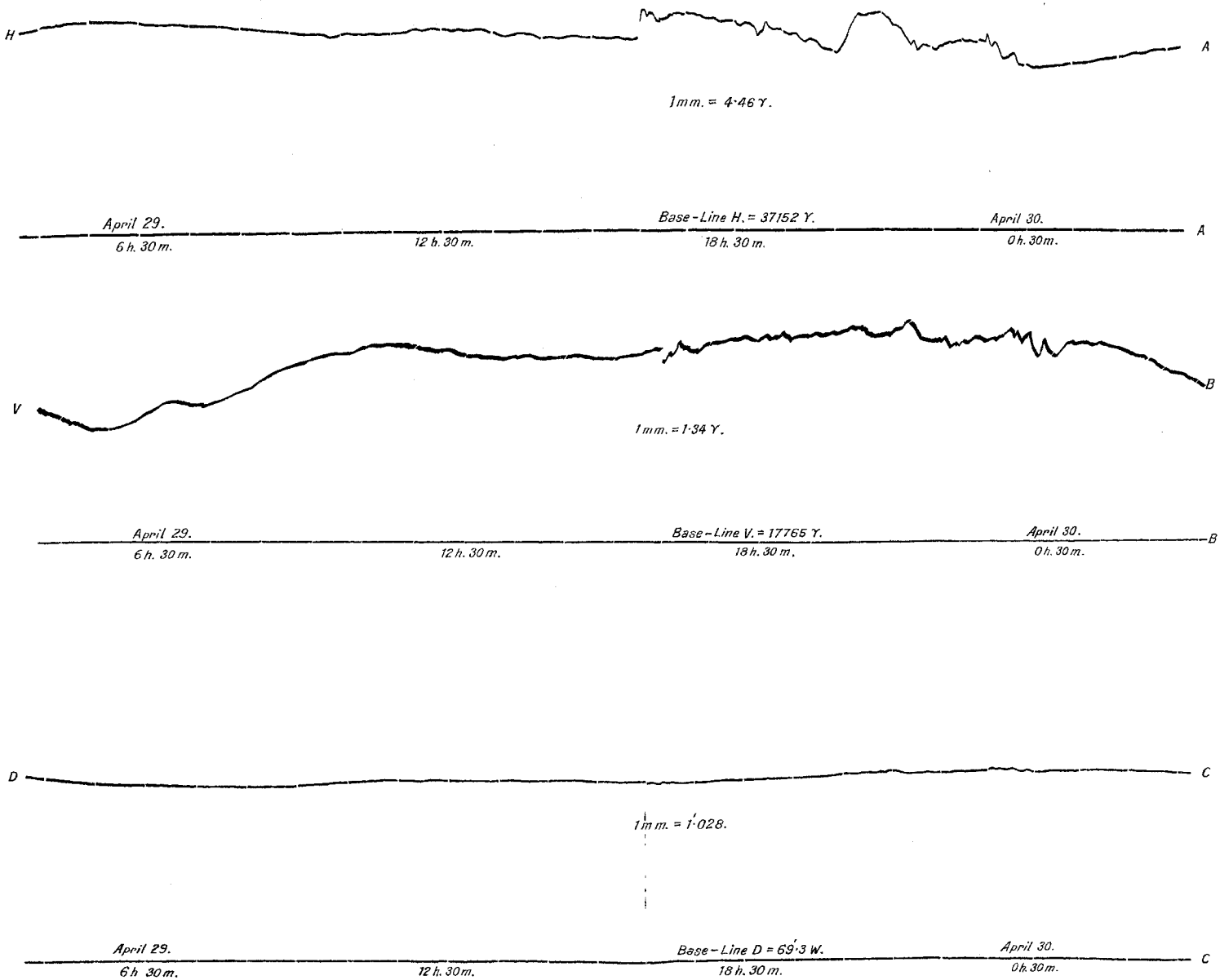
Date.	Phase.	Time. G. M. T.	Period (Sec.).	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance (Km.)	Remarks.
1933.		H . M.S.					
Dec. 13th	A_N P'	21 43 9	...	...	...	16350	Slight. Epc:— Pacific Ocean off Central America, 180° N., 140° W. (U. S. C.G.S.)
	PR_1	21 46 27	...	...	...	...	
	Sc Pc PcS	21 53 24	...	...	...	...	
	SR_1	22 5 43	...	...	...	...	
	M	23 4 43	17	5	...	...	
	F	23 52 0	...	...	...	...	
„ 13th	A_E P	21 43 9	...	...	...	16350	Do.
	eL	22 34 0	...	...	...	...	
	M	22 55 58	16	...	6	...	
	F	23 57 0	...	...	...	...	
„ 14th	A_N e	8 34 0	...	...	...	...	Tremors.
	f	8 56 0	...	...	...	...	
	A_E e	8 27 0	...	...	...	...	Do.
	f	8 56 0	...	...	...	...	
„ 14th	A_N eP	12 47 17	...	...	...	2270	Slight, Epc:— North of Andaman Islands, 14° N., 94° E. (Tentative),
	eS	12 51 3	...	...	...	...	
	L	12 52 56	...	...	...	...	
	M	12 54 26	7	4	...	...	
	F	13 10 0	...	...	...	...	
	A_E eP	12 47 17	...	...	...	...	
	eS	12 51 3	...	...	...	...	
	L	12 52 56	...	...	...	...	
	M	12 54 50	7	...	3	...	
	F	13 7 0	...	...	...	...	
„ 14th	A_N P	18 56 21	...	...	...	2340	Slight. Epc.:— Same as in previous shock.
	S	19 0 14	...	...	...	...	
	L	19 2 25	...	...	...	...	
	F	19 35 0	...	...	...	...	
„ 14th	A_E P	18 56 21	...	...	...	2340	Do.
	S	19 0 14	...	...	...	...	
	L	19 2 25	...	...	...	...	
	F	19 42 0	...	...	...	...	
„ 17th	A_N e	23 10 0	...	...	...	...	Tremors.
	f	23 33 0	...	...	...	...	
„ 17th	A_E e	23 15 0	...	...	...	...	Do.
	f	23 33 0	...	...	...	...	
„ 18th	A_N e	10 29 0	...	...	...	...	Feeble distant.
	M	10 38 26	11	1	...	...	
	F	11 12 0	...	...	...	...	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ) A_N	Amplitude (μ) A_E	Distance △ (Km.).	Remarks
1933.		H. M. S.					
Dec. 18th	A_E e	10 29 0	...	...	...	...	Feeble distant.
	M	10 37 7	11	...	1	...	
	F	11 11 0	...	...	...	...	
„ 19th	A_N i	5 50 53	...	...	...	...	Very feeble, very distant.
	i	6 0 4	...	...	...	...	
	F	6 39 0	...	...	...	...	
„ 24th	A_N e	10 57 56	...	...	...	...	Do.
	i	11 7 37	...	...	...	...	
	F	12 33 0	...	...	...	...	
„ 24th	A_E e	10 57 56	...	...	...	...	Do.
	i	11 7 37	...	...	...	...	
	F	12 40 0	...	...	...	...	
„ 24th	A_N e	18 9 0	...	...	...	...	Tremors.
	f	18 21 0	...	...	...	...	
	A_E e	18 9 0	...	...	...	...	Do.
	f	18 20 0	...	...	...	...	
„ 26th	A_N e	10 22 0	...	...	...	...	Do.
	f	10 47 0	...	...	...	...	
„ 26th	A_E e	10 24 0	...	...	...	...	Do.
	i	10 44 0	...	...	...	...	
„ 26th	A_N e	22 37 0	...	...	...	...	Do.
	f	22 55 0	...	...	...	...	
	A_E e	22 37 0	...	...	...	...	Do.
	f	22 55 2	...	...	...	...	
„ 27th	A_N e	11 47 0	...	...	...	...	Do.
	f	12 39 0	...	...	...	...	
	A_E e	11 47 0	...	...	...	...	Do.
	f	12 52 0	...	...	...	...	
„ 31st	A_N e	12 50 0	...	...	...	...	Do.
	f	13 17 0	...	...	...	...	
„ 31st	A_E e	12 49 0	...	...	...	...	Do.
	f	13 23 0	...	...	...	...	

Alibag Observatory Magnetograms, 1933.

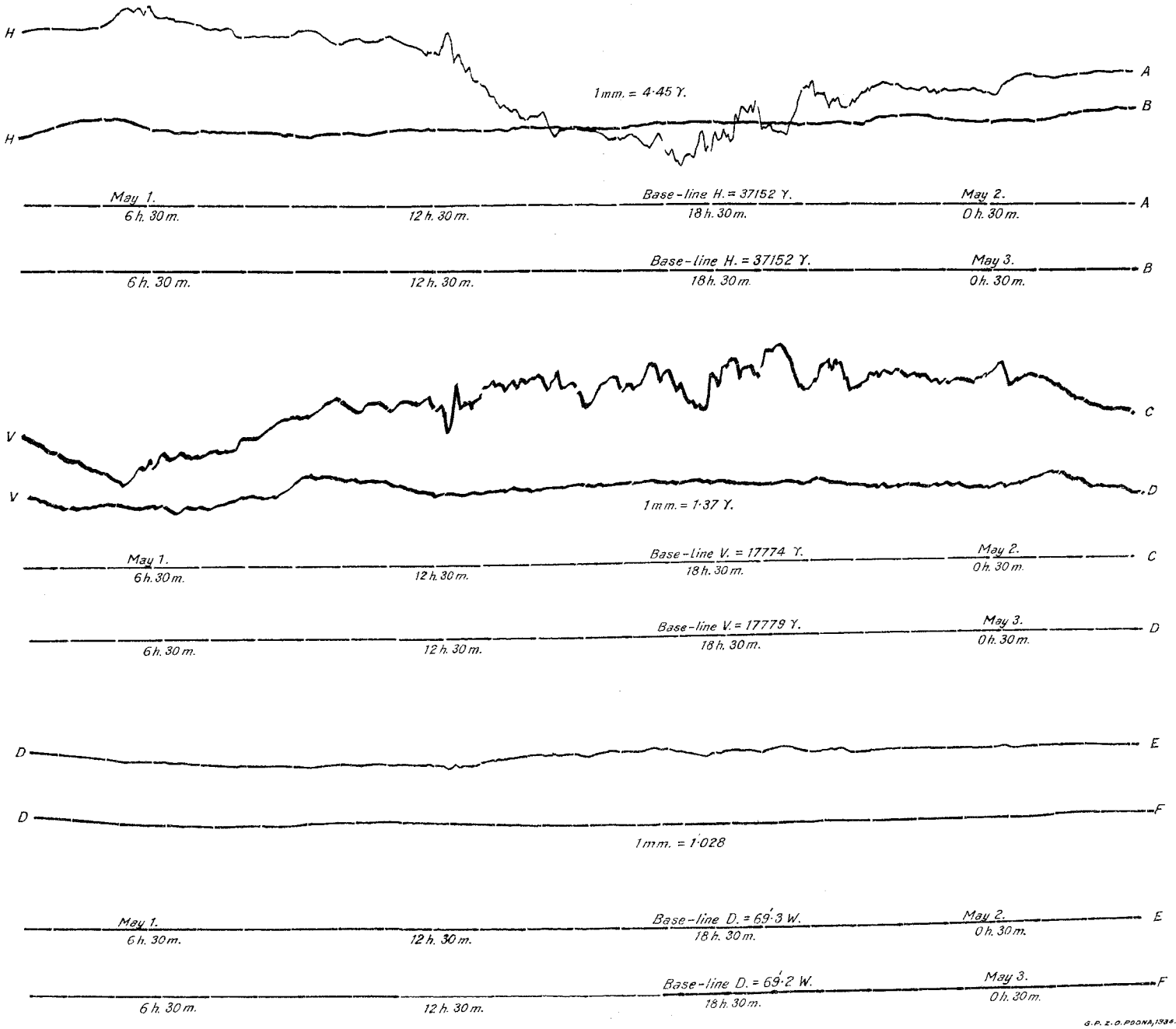


Alibag Observatory Magnetograms, 1933.



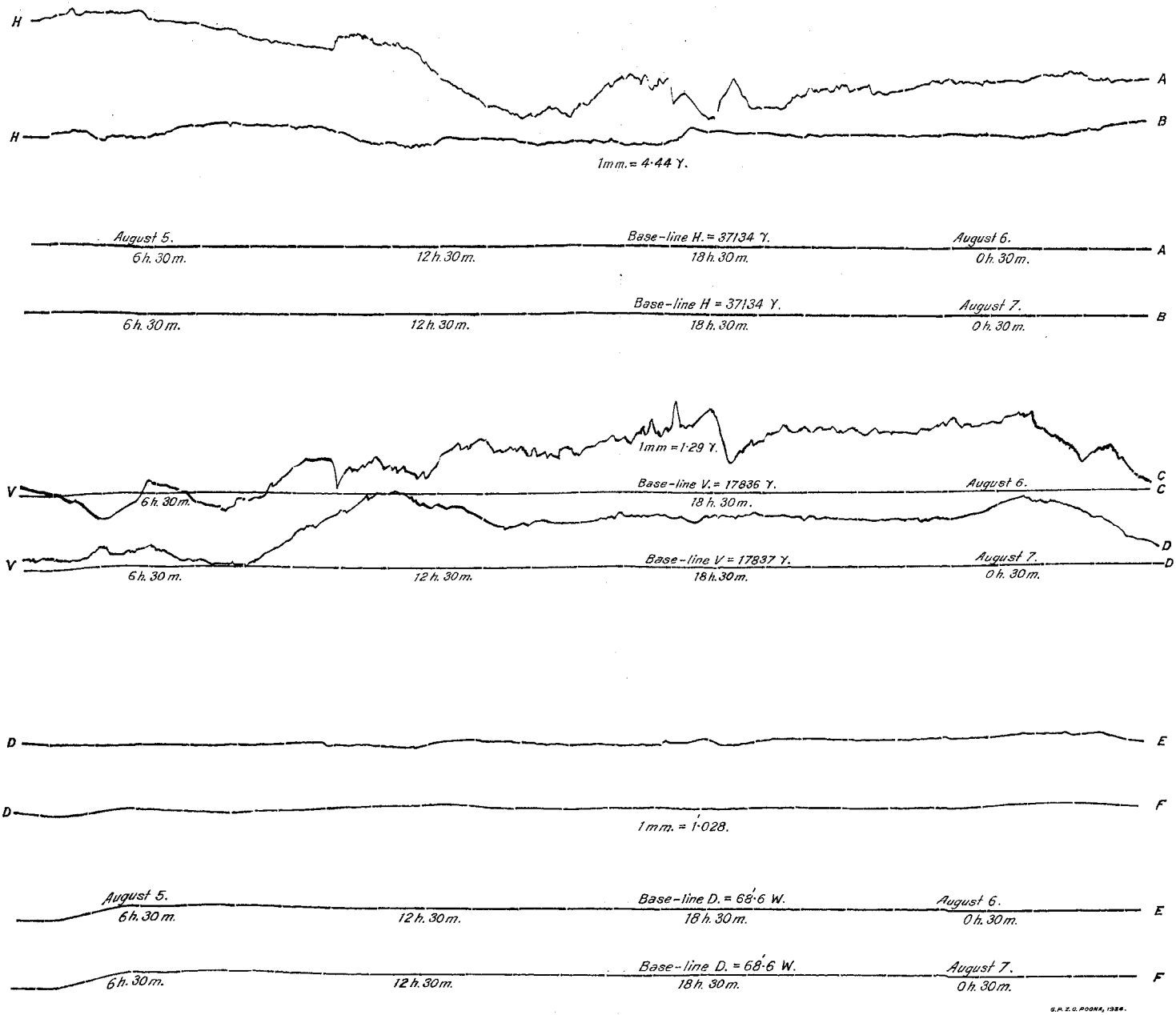
S. P. I. O. POONA, 1936.

Alibag Observatory Magnetograms, 1933.



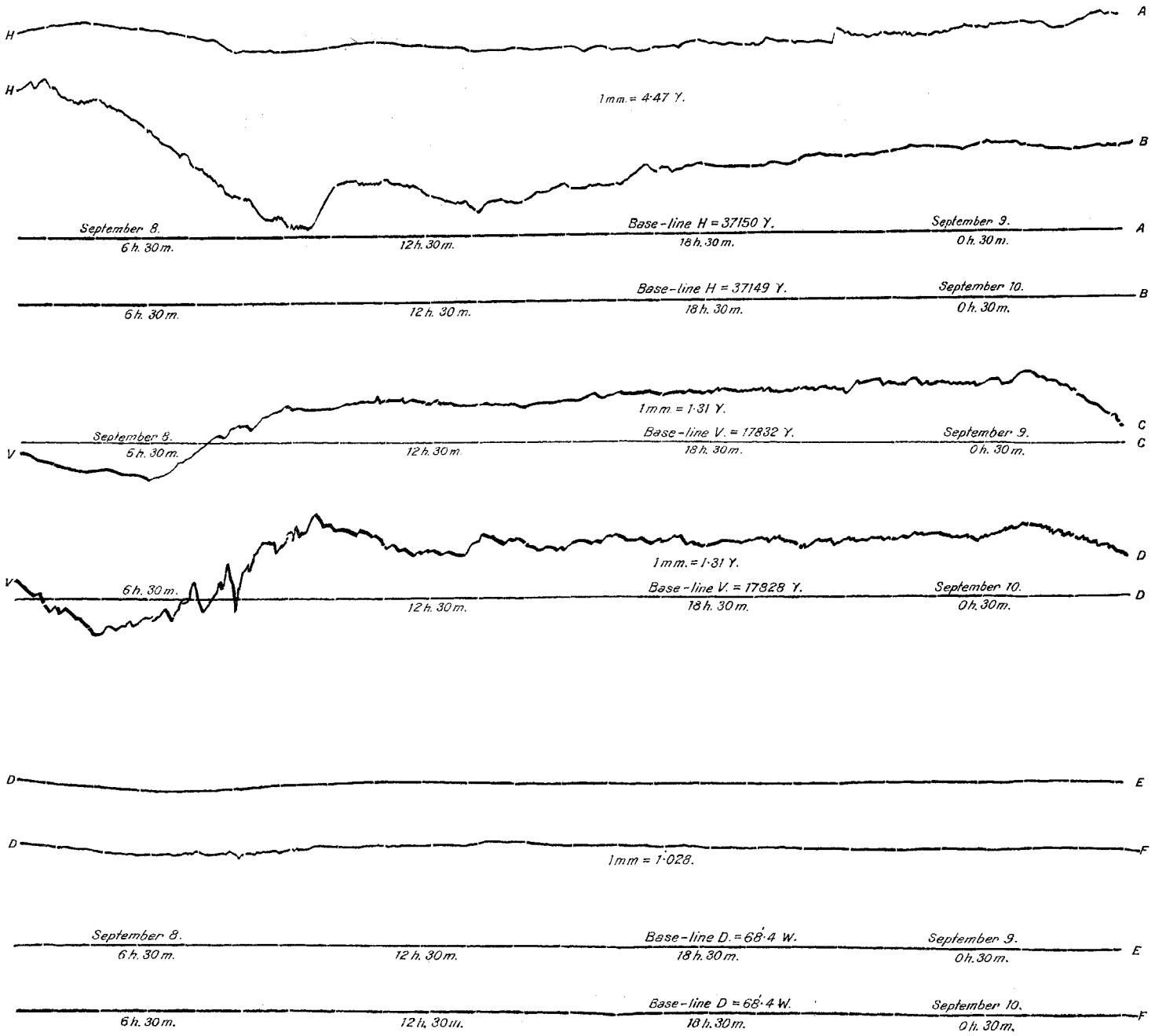
G.P.Z.O. POONA, 1934.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1933.



G.P.I.C. POONA, 1934.

Alibag Observatory Magnetograms, 1933.



G.P.Z.O. POONA, 1937.

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